

ENGLISH 102: HOW ARGUMENTS WORK



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English 102: How Arguments Work

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Licensing

A detailed breakdown of this resource's licensing can be found in **Back Matter/Detailed Licensing**.

1: Introduction- Why Study Argument?

Audio Version

What is college about if not about ideas? How do we respond to others' ideas and form our own?

I am an engaged citizen, a partner, a writer, and a mother who feels good about many decisions I've made in my life, but I often don't have my own ideas clear. Sometimes I feel a little despairing about how much I'm unsure of. I listen to the news or I read the voter booklet or I mull over a disagreement between colleagues and a million questions come into my head.

At other times I have a strong sense of my opinion but a hard time explaining it. When I try to write, I struggle. Every time, I hope that for once writing will come easy, and every time, I end up frustrated. I have to remind myself that I have been through this struggle many times before and that certain practices help. If I stick with the process, both my ideas and my writing get clearer. And I feel satisfaction in that increasing clarity. The aha moments bring relief and some sense of wonder.

In college, we are faced with so much pressure to perform and figure out our futures. It's easy to forget that academia also ensures that we are not alone. We don't have to do our thinking or our writing in isolation; it wouldn't make sense to try. Thinking and writing happen in conversation, in relationship. On almost any given topic, there is a rich, contentious community of ideas out there, ideas that build on and often contradict each other. We could start from scratch, but why? We contribute more if we find a way to enter the conversation.

This book is meant as a practical guide to help students join that conversation. Joining it means moving through a series of steps, from understanding and describing others' arguments, to deciding whether or to what extent we agree, to articulating our own points in response. These steps match up with the following typical college writing assignments:

- Summaries describe the ideas in an argument we have read.
- Assessments offer a judgment on how strong the argument is.
- Response papers make recommendations in response to the strengths or weaknesses of the argument.
- Research-based arguments describe and assess multiple sources in order to arrive at a new perspective.

This book follows that sequence. Chapter 2 describes how to figure out the logical structure of an argument, Chapter 3 explains how to summarize it, and Chapter 4 explores how to test the strength of the argument and make a judgment about it. Chapter 5 suggests ways to offer something new in response. Chapter 6 describes how to find and examine multiple sources on a topic, and Chapter 7 shows how research can lead us to develop an argument of our own.

My how-to approach is inspired by Gerald Graff and Cathy Birkenstein's popular text *They Say I Say: The Moves That Matter in Academic Writing*. They write, "What makes writers masters of their trade is...their mastery of an inventory of basic moves that they probably picked up by reading a wide range of other accomplished writers." Here, I have tried to extend their approach to investigate the hows and whys and whens of specific argumentative strategies for a course that goes beyond introductory composition. Graff and Birkenstein themselves question the usefulness of learning "logical principles of argument" such as "syllogisms, warrants, logical fallacies, or the differences between inductive and deductive reasoning." However, I argue that we can frame many logical principles in terms of practical templates. We can study how to make better arguments without getting bogged down in rhetorical terminology. For example, this book does not describe the "post hoc ergo propter hoc fallacy," but it does teach us to question the assumption that an earlier event causes a later event.

In addition to preparing students to enter the academic conversation, this book aims to teach them how to recognize and use appeals that go beyond logic. I consider that persuasion happens in the context of an imagined relationship between writer and reader. Chapter 8 looks at how arguments move us and Chapter 9 explores how they establish trust and a sense of connection. Chapter 10 on the argument analysis essay discusses how we can give a picture of an argument as a whole, finding connections between its appeals to emotion and trust and its logical structure. Finally, Chapter 11 considers techniques for shaping individual sentences to make our arguments clearer and more powerful.

As writers, we all have to feel at times that we are struggling in the dark. My hope is that this book offers practices that will help students find their way. I hope it helps them gain confidence about putting their own two cents into the academic conversation.

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2: READING TO FIGURE OUT THE ARGUMENT

2.1: Overview- Reading to Write

2.2: Types of Claims to Look out for

2.3: Making Notes on the Writer's Claims

2.4: Deciding Which Is the Main Claim

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2.1: Overview- Reading to Write

Media Alternative

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In almost every college class, we are asked to read someone else's writing, explain what that person is arguing, and point out the strengths and weaknesses of their argument. This chapter offers tools for figuring out the structure of an argument and describing it. In later chapters, we will talk about responding to arguments and analyzing how arguments play on emotion and gain the audience's trust.

So when you are just trying to get the barebones ideas about something you have read straight, how do you go about it? An argument is a swarming cluster of words. How do you get to the heart of it?

In this chapter we look at how to take notes not just on the meaning of each part of the argument but also on its relation to the other parts. Then we use these notes to draw a visual map of an argument. In the map we see the argument's momentum as the reason points us toward the claim. We see how each element implies, supports, limits, or contradicts other elements. Thus, we begin to imagine where the argument is vulnerable and how it might be modified.

In Chapter 3, we'll discuss how to use this logical map to write a summary, and in Chapter 4, we'll see how to follow up the summary with our own opinions.



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2.2: Types of Claims to Look out for

Media Alternative

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As we make notes on what a writer is claiming at each point, it is worth distinguishing what kind of claim they are making.

Claims of Policy

The most familiar kind of argument demands action. It is easy to see when the writer is asking readers to do something. Here are a few phrases that signal a claim of policy, a claim that is pushing readers to do something:

- We should _____.
- We ought to _____.
- We must _____.
- Let's _____.
- The best course is _____.
- The solution is to _____.
- The next step should be _____.
- We should consider _____.
- Further research should be done to determine _____.

Here are a few sample claims of policy:

- Landlords should not be allowed to raise the rent more than 2% per year.
- The federal government should require a background check before allowing anyone to buy a gun.
- Social media accounts should not be censored in any way.

A claim of policy can also look like a direct command, such as “So if you are an American citizen, don’t let anything stop you from voting.”

Note that not all claims of policy give details or specifics about what should be done or how. Sometimes an author is only trying to build momentum and point us in a certain direction. For example, “Schools must find a way to make bathrooms more private for everyone, not just transgender people.”

Claims of policy don’t have to be about dramatic actions. Even discussion, research, and writing are kinds of action. For example, “Americans need to learn more about other wealthy nations’ health care systems in order to see how much better things could be in America.”



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Claims of Fact

Arguments do not always point toward action. Sometimes writers want us to share their vision of reality on a particular subject. They may want to paint a picture of how something happened, describe a trend, or convince us that something is bad or good.

In some cases, the writer may want to share a particular vision of what something is like, what effects something has, how something is changing, or of how something unfolded in the past. The argument might define a phenomenon, a trend, or a period of history.

Often these claims are simply presented as fact, and an uncritical reader may not see them as arguments at all. However, very often claims of fact are more controversial than they seem. For example, consider the claim, “Caffeine boosts performance.” Does it really? How much? How do we know? Performance at what kind of task? For everyone? Doesn't it also have downsides? A writer could spend a book convincing us that caffeine really boosts performance and explaining exactly what they mean by those three words.

Some phrases writers might use to introduce a claim of fact include the following:

- Research suggests that _____.
- The data indicate that _____.
- _____ is increasing or decreasing.
- There is a trend toward _____.
- _____ causes _____.
- _____ leads to _____.

Often a claim of fact will be the basis for other claims about what we should do that look more like what we associate with the word “argument.” However, many pieces of writing in websites, magazines, office settings, and academic settings don't try to move people toward action. They aim primarily at getting readers to agree with their view of what is fact. For example, it took many years of argument, research, and public messaging before most people accepted the claim that “Smoking causes cancer.”

Here are a few arguable sample claims of fact:

- It is easier to grow up biracial in Hawaii than in any other part of the United States.
- Raising the minimum wage will force many small businesses to lay off workers.
- Fires in the western United States have gotten worse primarily because of climate change.
- Antidepressants provide the most benefit when combined with talk therapy.

Claims of Value

In other cases, the writer is not just trying to convince us that something is a certain way or causes something, but is trying to say how good or bad that thing is. They are rating it, trying to get us to share her assessment of its value. Think of a movie or book review or an Amazon or Yelp review. Even a “like” on Facebook or a thumbs up on a text message is a claim of value.

Claims of value are fairly easy to identify. Some phrases that indicate a claim of value include the following:

- _____ is terrible/disappointing/underwhelming.
- _____ is mediocre/average/decent/acceptable.
- We should celebrate _____.
- _____ is great, wonderful, fantastic, impressive, makes a substantial contribution to _____.

A claim of value can also make a comparison. It might assert that something is better than, worse than, or equal to something else. Some phrases that signal a comparative claim of value include these:

- _____ is the best _____.
- _____ is the worst _____.
- _____ is better than _____.
- _____ is worse than _____.
- _____ is just as good as _____.
- _____ is just as bad as _____.

The following are examples of claims of value:

- The Bay Area is the best place to start a biotech career.
- Forest fires are becoming the worst threat to public health in California.
- Human rights are more important than border security.
- Experimenting with drag is the best way I've found to explore my feelings about masculinity and femininity.
- It was so rude when that lady asked you what race you are.

Note that the above arguments all include claims of fact but go beyond observing to praise or criticize what they are observing.

Practice Exercise 2.2.1

Interactive Content

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Practice Exercise 2.2.2

On a social media site like Facebook or Twitter or on your favorite news site, find an example of one of each kind of claim.

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2.3: Making Notes on the Writer's Claims

Media Alternative

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A first step toward summarizing and responding to an argument is to first make margin notes on the claims. Let's take the following argument as an example:

Sample Argument: "Wouldn't We All Cross the Border?"

All the disagreement over immigration policy I have been hearing about in the news lately reminds me that while I believe in the rule of law, I feel profoundly uncomfortable with the idea of keeping people out who are desperate to come in. Is illegal immigration actually wrong? Is it unethical to cross a border without permission?

I don't have a clear vision yet of what the right border policy would be, and I admit that completely open borders would put our security at risk. But surely there are ways to regulate the border without criminalizing people who are driven by need and good intentions.

If I were raising children in an impoverished third-world community plagued by violence, and if I had a chance to get my family to the U.S., I would take it. I would try to cross a border illegally so my children would get enough to eat and would have a more stable childhood and a chance at a better education and a better career. What parent would sit on their hands and tell themselves, "I want to give my child a better life, but oh well. If I don't have the papers, I guess it would be wrong"?

If most of us, under desperate circumstances, would cross the border without permission and feel no moral qualms about doing so, then we must recognize this crossing as an ethical, reasonable act. If it is ethical and reasonable, then how can either a wall or a detention center be on the side of justice? We must find a policy that treats migrants as we would want to be treated—with empathy, respect, and offers of help.

We can often paraphrase the claims more readily on a second read when we are already familiar with the content. Some need the physicality of taking notes by hand in the margins of a book or a printout.



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Some take notes by creating comments in Word or Google Docs. Others use online annotation systems like Hypothes.is. Another

way is to copy the text into a table in a word processing program and write notes in a second column, as we have done below:

Sample Margin Notes on an Argument's Claims

Section of the text	Notes on the claims
Wouldn't We All Cross the Border?	Implies a claim of fact: we would all cross the border (under what circumstances?)
All the disagreement over immigration policy I have been hearing about in the news lately reminds me that while I believe in the rule of law, I feel profoundly uncomfortable with the idea of keeping people out who are desperate to come in. Is illegal immigration actually wrong? Is it unethical to cross a border without permission?	Suggests a claim of value: It might not be wrong to cross illegally. But also suggests another claim of value: that "the rule of law" is right. Is this a contradiction?
I don't have a clear vision yet of what the right border policy would be, and I admit that completely open borders would put our security at risk. But surely there are ways to regulate the border without criminalizing people who are driven by need and good intentions.	Claim of policy about the border--we shouldn't criminalize people who have legitimate reasons to cross. Admits there are security risks in "open borders." Looking for some kind of middle ground that keeps us safe but doesn't criminalize migrants.
If I were raising children in an impoverished third-world community plagued by violence, and if I had a chance to get my family to the U.S., I would take it. I would try to cross a border illegally so my children would get enough to eat and would have a more stable childhood and a chance at a better education and a better career. What parent would sit on their hands and tell themselves, "I want to give my child a better life, but oh well. If I don't have the papers, I guess it would be wrong"?	Claim of fact: the author would consider it right to cross illegally to benefit their children. That is, if their whole family didn't have enough money, a safe place to live, or access to a good education. They imply another claim of fact: that any parent would do the same and feel okay about it.

Section of the text	Notes on the claims
If most of us, under desperate circumstances, would cross the border without permission and feel no moral qualms about doing so, then we must recognize this crossing as an ethical, reasonable act. If it is ethical and reasonable, then how can either a wall or a detention center be on the side of justice? We must find a policy that treats migrants as we would want to be treated--with empathy, respect, and offers of help.	Starts with the same claim of fact as in the title and the previous paragraph: most people would cross the border illegally. Adds the idea that we wouldn't feel it was wrong. The implication is that if all these people would feel it is right, then it really is "ethical and reasonable." "We must recognize" implies a claim of policy--that people should talk about illegal crossings publicly in a different way than we do now. Claim of policy: Border walls and detention centers are not right. Ends with three policy recommendations for how to treat migrants: empathy, respect, and help.

Notice that attempting to summarize each claim can actually take more space than the original text itself if we are summarizing in detail and trying to be very precise about what the text claims and implies. Of course, we won't want to or need to do this in such detail for every paragraph of every reading we are assigned to write about. We can resort to it when the argument gets harder to follow or when it's especially important to be precise.

Practice Exercise 2.3.1

Make notes in your own words on the claims of fact, value, and policy you find in an argument you are reading for class or one of [our suggested readings](#). Make a table with two columns and paste the argument into the first column. In the second column, summarize the points the author makes as in the example above. If you like, you can make a copy of this [Google Docs notes template](#).

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2.4: Deciding Which Is the Main Claim

Media Alternative

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Now that we have this list of claims in the margin of the text, we know some of the things that the author wants us to believe. How do we sort them and put them in relation to each other? In this case, we found claims of policy, fact, and value, some of which were repeated in different parts of the argument. Which claim is the main point? How do other claims support this one?



Which direction is the author taking the argument?

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We can try asking ourselves the following questions to see if we already have a sense of what the argument's goal is.

- What does the writer want us to believe?
- What does the writer most want to convince us of?
- Where is the writer going with this?
- If the writer had to make their point in just one sentence, what would they say?

A good first place to look for the focus, of course, is the title. Often the title will declare the main claim outright. Here, the title question "Wouldn't We All Cross the Border?" implies the answer "Yes." We can look for the same idea in the text and check whether it seems to be the main one. The third paragraph describes why the author would cross the border and then generalizes to claim that others would do the same. At the start of the last paragraph, the writer declares that " ...most of us, under desperate circumstances, would cross the border without permission and feel no moral qualms about doing so." Note that this is a claim of fact about what people would do and how they would feel about it.

But is this the main claim? When we review the other sections, we find several other claims of policy. Introductions set expectations, and here, the first paragraph alludes to public debates on immigration policy. It suggests that it may not be right to stop people from coming into America, and it may not be wrong to cross the border, even illegally. These early references to what is right suggest that the argument aims to do more than describe how people might feel under different circumstances. The argument is going to weigh in on what border policy should be. The second paragraph confirms this sense as it builds up to the still vague sentence, " Surely there are ways to regulate the border without criminalizing people who are driven by need and good intentions."

In the last paragraph, we learn what these ways might involve. Three different claims of policy emerge:

1. "... We must recognize this crossing as an ethical, reasonable act."
2. "How can either a wall or a detention center be on the side of justice?" (The implication, of course, is that they cannot be.)
3. " We must find a policy that treats migrants as we would want to be treated--with empathy, respect, and offers of help."

Which of these final claims is the overall focus? Arguments sometimes emphasize their main point in the very last sentence, in part to make it memorable. However, the end of the argument can also be a place for the author to go a little beyond their main point and suggest issues for further thought. The phrase "empathy, respect, and offers of help" sounds important, but we should note that the rest of the argument isn't about how to help migrants. However, the idea that we should respond more positively to migrants has recurred throughout. The idea that migrants are not in the wrong--that they are not criminals--is clearly key, and so is the idea that we should change border policy accordingly.

Here is one way, then, to combine those last two ideas into a summary of the overall claim of the argument:

Claim: Border policy should not criminalize undocumented immigrants.

Practice Exercise 2.4.1

Choose an argument you are reading for class or one of [our suggested readings](#), read it closely, and then try to summarize the main claim in your own words. If you are unsure, return to [making notes on the writer's claims](#) and then reflect on the questions above.

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2.5: Finding the Reasons

Media Alternative

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Once we know what the main point of the reading is, we can ask ourselves what reasons the author gives. We can go through our annotations to look at the other claims and see how some may be used as reasons for the main claim or as reasons for one of the reasons.

We can write the claims in a map and use the arrows to show which claim works as a reason supporting which other claim. Each claim moves our mind from one idea to the next in the direction the writer wants it to go. The claim farthest to the right, the one that the others point toward, is the main point. Such maps might take a few different forms, such as these:

Reason → Claim

Reason A → Reason B → Claim

Reason A → Claim

Reason B ↗

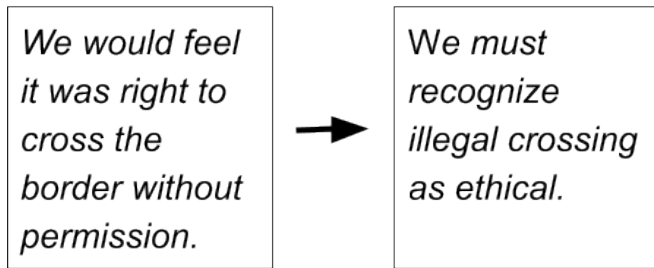
How can we tell where to put each claim on the map and where to point the arrows? It can help to remember that particular words and phrases in academic and professional writing basically act as arrows. They signal that one idea is supposed to lead to another. Here are some such phrases:

- Because _____, _____.
- Because of this, _____.
- If _____, then _____.
- Since _____, _____.
- For this reason, _____.
- We can conclude _____.
- Therefore, _____.
- So _____.
- Consequently, _____.
- As a result, _____.
- Hence _____.
- Thus _____.
- It follows that _____.

For example, in the above argument, “If _____, then _____.” connects two claims in the following sentence:

“If most of us, under desperate circumstances, would cross the border without permission and feel no moral qualms about doing so, then we must recognize this crossing as an ethical, reasonable act.”

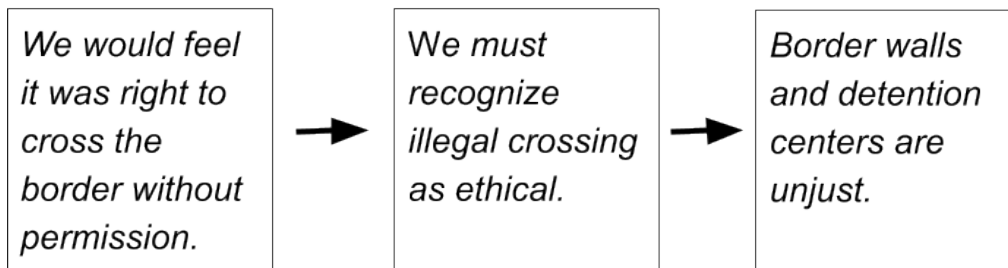
We could write a short version of the first half of the sentence, put it in a box, and point it toward a short version of the second half:



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See the [accessible text description of this one-reason map](#).

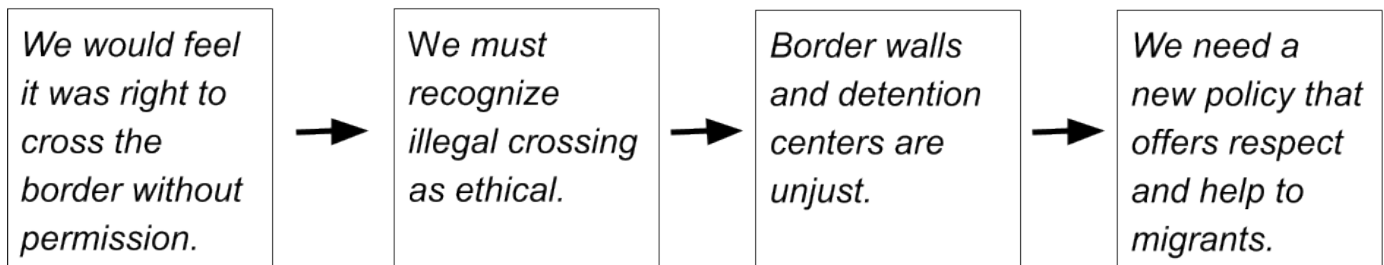
The following sentence sets up another If_____, then _____ statement: "If it is ethical and reasonable, then how can either a wall or a detention center be on the side of justice?"

We could add this on thus:



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See the [accessible text description of this two-reason map](#).

If border walls and detention centers are unjust, there must be a need for an alternate approach. The next sentence claims, "We must find a policy that treats migrants as we would want to be treated--with empathy, respect, and offers of help." We can offer a short version of this sentence as the final implication.



"Three Reasons Argument Map" by Anna Mills is licensed [CC BY-NC 4.0](#).
See the [accessible text description of this three-reason map](#).

Practice Exercise 2.5.1

1. Choose an argument you are reading for class or one of [our suggested readings](#). You may want to focus on a short excerpt of one or more paragraphs.
2. Read your text closely and identify any reasons given to support the main claim and any reasons for those reasons.
3. Then map out the author's reasons as in the examples above. Describe each reason in your own words. You can handwrite your map or copy this [Google Drawings template](#) and insert the reasons. Later, you will add other elements of the argument to the map.

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2.6: Finding the Counterarguments

Media Alternative

Listen to an audio version of this page (4 min, 35 sec):

Very often, as we read an argument we will find not just what the author thinks and believes, but the author's description of other people's opposing arguments as well. An argument is part of an ongoing broader conversation about the subject, and the writer can remind us of what they are responding to. So as we read we can look for and mark these counterarguments.

In a complex text it can be easy to miss that a particular point is actually not one that the writer agrees with—they may be bringing it up in order to shoot it down. We can look out for particular phrases that are often used in academic writing to signal that the writer is switching sides temporarily and describing an idea that goes against the argument.



In chess, it's easy to tell which piece is on which side, but in a text we need other clues.

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Very often the way the author will both signal to us that they are introducing the counterargument and signal their attitude toward it. They will convey the degree to which they disagree and the respect or contempt they feel for this opposing view.

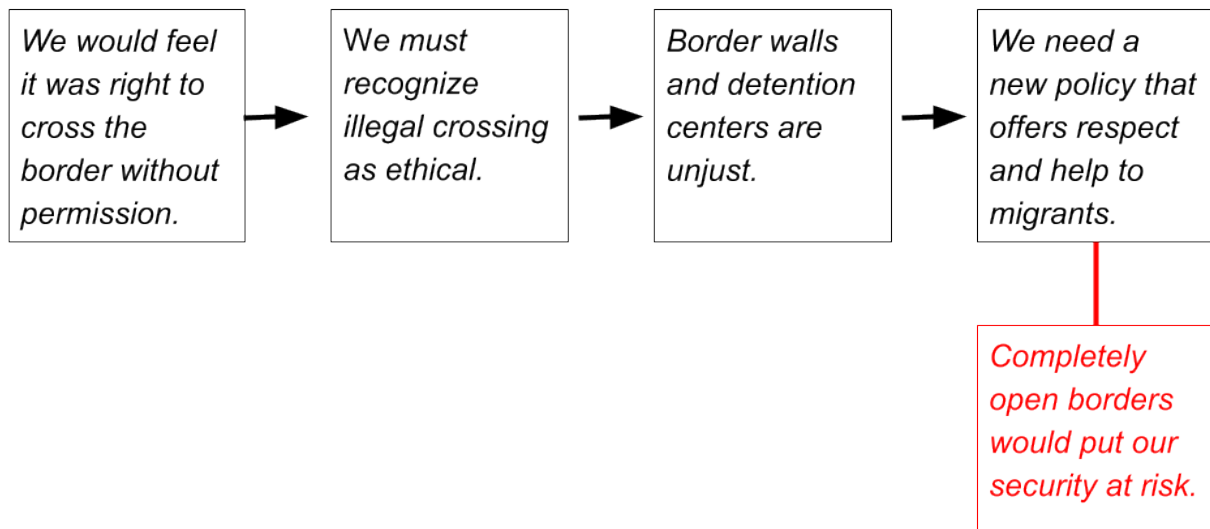
Common Phrases That Introduce Counterarguments

Attitude to the Counterargument	Phrases
Negative The writer thinks the counterargument is completely wrong.	• It is a popular misconception that_____. • Some have fallen for the idea that_____. • Many people mistakenly believe that_____.

Attitude to the Counterargument	Phrases
Neutral The writer is about to describe a counterargument without giving their opinion yet.	• Many people think _____. • Some, on the other hand, will argue that _____. • Some might disagree, claiming that _____. • Of course, many have claimed that _____. • Some will take issue with _____, arguing that _____. • Some will object that _____. • Some will dispute the idea that _____, claiming that _____. • One criticism of this way of thinking is that _____. Note that these neutral examples don't tell us whether the writer thinks the counterargument has any validity. Usually, the writer will want to follow them with a sentence that does reveal their opinion.
Positive The writer sees some merit in the counterargument. They agree with it even though it hurts their argument. This is called concession.	• It is true that _____. • I do concede _____. • We should grant that _____. • We must admit that _____. • I acknowledge that _____. • X has a point that _____. • Admittedly, _____. • Of course, _____. • To be sure, _____. • There may be something to the idea that _____.

In the border argument example, the writer never directly mentions other writers who disagree. Instead, they signal with the phrase “I admit” that they are going to summarize a valid point which goes against their own main argument: “I admit that completely open borders would put our security at risk.”

We could add this to our map as follows, with the counterargument in red to show it goes against the rest of the argument:



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 See the [accessible text description of the argument map with counterargument](#).

Practice Exercise 2.6.1

1. Choose an argument you are reading for class or one of [our suggested readings](#). You may want to focus on a short excerpt of one or more paragraphs.
2. Read your text closely and identify any counterarguments it mentions. What is the writer's attitude to each counterargument?
3. Describe each counterargument in your own words and add it to your argument map. You can [handwrite your map](#) or copy this [Google Drawings template](#).

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2.7: Finding the Responses to the Counterarguments

Media Alternative

Listen to an audio version of this page (4 min, 16 sec):

After a writer summarizes another perspective, they will signal that they are switching back to their own perspective. If they have not already given a hint about their attitude to the other side, they will have to make their response clear now. Do they see the counterargument as completely wrong-headed, or as having some merit?

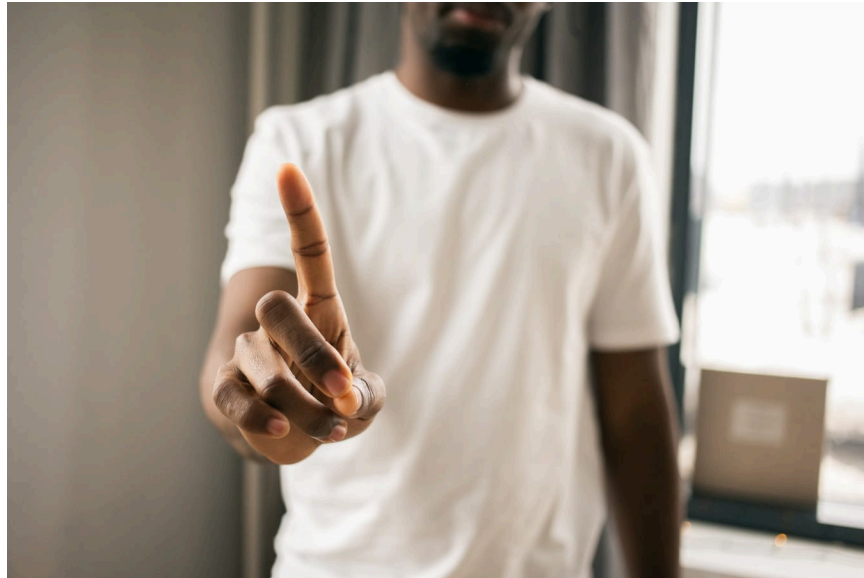


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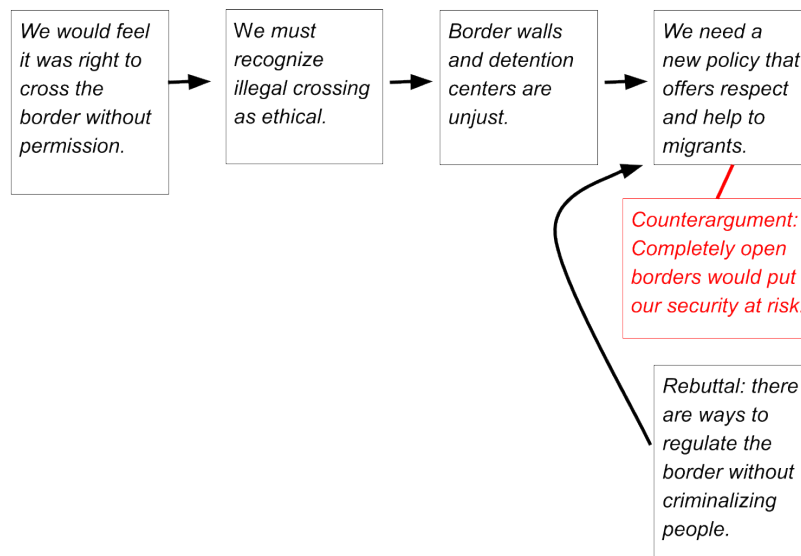
If the writer completely disagrees with the counterargument, they will follow up their description of it by pointing out its flaws. This direct rebuttal will bring the readers back to the writer's side. If they have just conceded a point, they will now emphasize the reason why their own argument still holds. The more the writer has credited the counterargument, the more they will need to explain why readers shouldn't accept it, at least not completely. Below are some phrases which can point toward the problem or limitation of the counterargument.

Common Phrases for Responding to Counterarguments

Attitude to the Counterargument	Phrases
If the writer considers the counterargument totally wrong	• This idea misses the fact that _____. • I disagree because _____. • This depends on the assumption that _____ which is incorrect because _____. • This argument overlooks _____. • This argument contradicts itself _____. • This is mistaken because _____.

Attitude to the Counterargument	Phrases
If the writer partly agrees with the counterargument	• It is true that _____, but_____. • I do concede_____, and yet_____. • We should grant that_____, but we must still acknowledge that _____. • We can admit that_____ and still believe that _____. • I acknowledge that _____, and yet we should nevertheless recognize that _____. • Critics have a point that _____; however it is more important that we focus on _____. • Admittedly, _____. However, _____. • Of course, _____, but I still insist that_____. • To be sure, _____; but _____. • There may be something to the idea that _____, and yet _____.

In the border argument example, the writer concedes that the counterargument does have merit: "I admit that completely open borders would put our security at risk." Immediately, the writer responds, "But surely there are ways to regulate the border without criminalizing people who are driven by need and good intentions." The word "but" signals the transition from concession back to the writer's own side. In the map, we can put the rebuttal below the counterargument and use the arrow to show it supporting the main claim.



"Argument Map with Counterargument and Rebuttal" by Anna Mills is licensed [CC BY-NC 4.0](#). See the [accessible text description of the argument map with counterargument and rebuttal](#).

Practice Exercise 2.7.1

1. Choose an argument you are reading for class or one of our suggested readings. You may want to focus on a short excerpt of one or more paragraphs.
2. Read your text closely and identify any counterarguments it mentions. What is the writer's attitude to each counterargument?
3. Decide what your attitude to this counterargument is. Choose a phrase from the above table to introduce the counterargument.

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2.8: Finding the Limits on the Argument

Media Alternative

Listen to an audio version of this page (7 min, 29 sec):

If we are getting ready to summarize and respond to an argument, we need to notice exactly how the writer has qualified or limited what they are saying.

Often if a counterargument has some merit, a writer may respond acknowledging that, taking a step back and limiting what they are claiming. They might make an exception for a particular case where they realize their initial claim wouldn't hold. Or they might clarify that their claim only applies to a particular group or situation.



Just as we might limit a tomato harvest to ripe tomatoes, we might want to limit an argument to certain cases and not others.

Photo by [Roon Z](#) on [Pexels](#) under the [Pexels License](#).

Faced with a powerful counterargument, a writer might also admit a certain degree of uncertainty about their claim as a whole. They might consider the argument worth putting forward for consideration even if they are not sure it is right.

Common Phrases Used to Limit Arguments

Kinds of limitations on arguments	Phrases
Expressing less than perfect certainty	• Perhaps, _____. • It is worth considering the idea that _____. • _____ may _____. • _____ might _____. • _____ could possibly _____. • Probably, _____. • Very likely, _____. • Almost certainly, _____.
Limiting what the argument is claiming or restricting the scope of the argument	• Few _____. • In a few cases, _____. • Some _____. • Many _____. • Most _____. • The vast majority of _____. • Almost all _____. • _____ unless _____. • If it is not the case that _____, then _____. • _____, except in the case that _____. • We can exclude cases where _____.

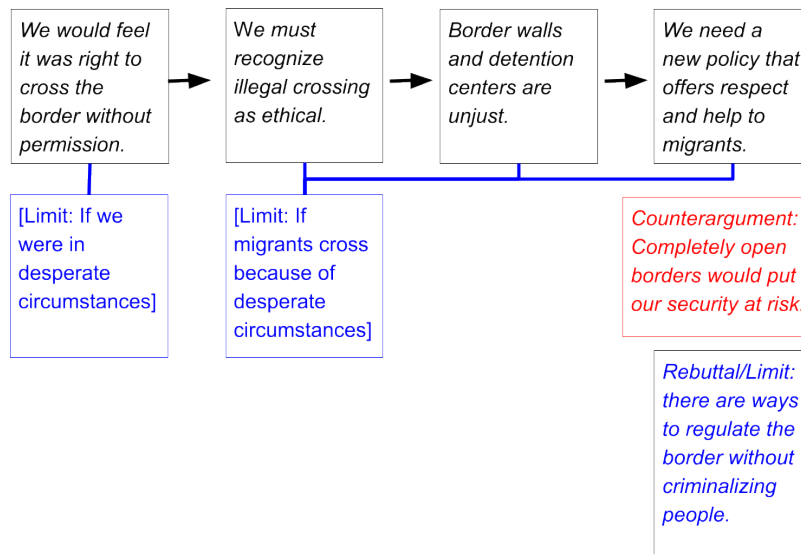
When we read arguments, we can watch for these limitations and add them to our argument map. In the case of the border argument, limitations are found throughout. We have highlighted them and commented on them below.

Sample Notes on an Argument's Limits

Argument	Notes
Title: Wouldn't We All Cross the Border?	Not limited at all--a universal "all"

Argument	Notes
All the disagreement over immigration policy I have been hearing about in the news lately reminds me that while I believe in the rule of law, I feel profoundly uncomfortable with the idea of keeping people out who are desperate to come in. Is illegal immigration actually wrong? Is it unethical to cross a border without permission?	Limits the group of immigrants we are talking about to those who are desperate. This is an argument about refugees of one kind or another, not about people who just feel they would be happier or more successful in the U.S. So maybe the author would still consider it fine to criminalize those who cross illegally because they prefer to live in the U.S. if they are not currently in dire straits.
I don't have a clear vision yet of what the right border policy would be, and I admit that completely open borders would put our security at risk. But surely there are ways to regulate the border without criminalizing people who are driven by need and good intentions.	Clarifies that some "regulation" of borders is okay. Their argument does not condemn all efforts to establish rules and consequences at the border. Again, this clarifies that this only applies to migrants with a compelling reason to cross.
If I were raising children in an impoverished third-world community plagued by violence, and if I had a chance to get my family to the U.S., I would take it. I would try to cross a border illegally so my children would get enough to eat and would have a more stable childhood and a chance at a better education and a better career. What parent would sit on their hands and tell themselves, "I want to give my child a better life, but oh well. If I don't have the papers, I guess it would be wrong"?	Outlines a specific circumstance that would justify crossing illegally, implying that other circumstances might not justify it.
If most of us, under desperate circumstances, would cross the border without permission and feel no moral qualms about doing so, then we must recognize this crossing as an ethical, reasonable act. If it is ethical and reasonable, then how can either a wall or a detention center be on the side of justice? We must find a policy that treats migrants as we would want to be treated--with empathy, respect, and offers of help.	Repeats the limitation to migrants who are desperate. Note: The final sentences don't mention any limitation on which migrants we are talking about.

The main limitation, then, can be entered into the argument map in blue and in brackets thus:



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See the [accessible text description of the argument map with limits](#).

Now that we have analyzed the parts of the argument and their relations to each other, we are ready for the next step demanded by most college writing assignments. Chapter 3 will discuss how to write a clear and precise summary of an argument.

Practice Exercise 2.8.1

Interactive Content

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Practice Exercise 2.8.2

1. Choose an argument you are reading for class or one of our suggested readings. You may want to focus on a short excerpt of one or more paragraphs.
2. Read your text closely and identify any limits it puts on any of its claims.
3. Describe each limit in your own words and add it to your argument map. You can handwrite your map or copy this [Google Drawings template](#).

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3: WRITING A SUMMARY OF ANOTHER WRITER'S ARGUMENT

Audio Version

In Chapter 2 we discussed strategies for understanding the reading by identifying the claims presented and mapping how they work together. Chapter 3 will focus on how to use this understanding to describe the argument in our own words. Such a description is called a summary, and it forms part of most college writing assignments. In some cases, the summary will be the entire essay. We may be given a page or word count range, which might be as short as a paragraph or as long as several pages. More frequently, the summary will be the starting point; a summary in the introduction or in the first page or two will serve to launch a discussion of our own opinion. In either case, we can use the summary strategies below to create a coherent chunk of writing that will give the reader a clear picture of the text we are analyzing.

The argument map can guide us as we write the summary. To make the map, we have already had to choose what to leave out and what to emphasize. We have already shown what role each claim plays in the overall argument. Now, instead of colors and arrows and labels like “claim” and “reason,” we will use strategic phrases to show how the parts fit together. As we choose words to paraphrase a writer’s points, we will want to reread the text to see how strongly the writer suggests something or what attitude they take toward a counterargument. Thus the process of writing a summary helps us get even clearer about the writer’s intentions and implications than we would in mapping out an argument. Ultimately, it will prepare us to comment, critique and respond more effectively, as we will see in [Chapter 4, "Assessing the Strength of an Argument."](#)

3.1: Introducing the Argument and the Main Claim

3.2: Describing the Reasoning

3.3: Describing How the Author Treats Counterarguments

3.4: Describing How the Author Limits the Claim

3.5: Putting the Summary Together

3.1: Introducing the Argument and the Main Claim

04: Assessing the Strength of an Argument

Introducing the Argument

Almost immediately, the reader of any summary will need some basic information about the argument summarized. We can name title and author in an introductory phrase. If the publication date and the publication name seem important, we can work those in too. For example, a summary could introduce the basic data on the sample border argument with the phrase "In her 2019 article "Wouldn't We All Cross the Border?", Anna Mills..." and follow it with a description of the topic, purpose, or main claim. Some options for introductory phrases include the following:

- In an article for _____, writer _____...
- The account of _____ in the piece _____ by _____...
- Writing in the journal _____, the scholar _____ ...

Next, probably right after the introductory phrase, the reader will want to know the main point of that argument. To introduce the main claim, we'll need a well-chosen verb to describe the author's intention, her purpose in writing. The most general possible verb to describe a main claim would be "says," as in "In her 2019 article "Wouldn't We All Cross the Border?", Anna Mills says..." But that would tell us so little about what Anna Mills is trying to do. Readers will be bored and will learn nothing from "says." If we choose a more dramatic and precise verb like "calls for," "criticizes," "describes," "argues," or "questions," then readers will feel the dynamism and momentum of both the argument and the summary. We can convey a lot about the structure of the argument, its degree of conviction or moderation, its tone and attitude by the word or phrase we choose to introduce each claim. As we choose those phrases, we will also be pushing ourselves to get an even clearer picture of the argument than we did by mapping it.



Just as a person might gesture toward a central feature of a landscape, a summary points readers toward the main claim of a text.

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Describing Claims of Fact

If the argument's main purpose is to describe reality in some way, we will want to let readers know if it is controversial or not. Is the writer defending their idea against obvious objections or counterarguments, or are they aiming to inform us about something we may not be aware of?

Phrases to introduce controversial claims of fact

- They argue that _____.
- She maintains that _____.
- He contends that _____.
- They assert that _____.
- She holds that _____.
- He insists that _____.
- She thinks _____.
- They believe that _____.

Phrases to introduce widely accepted claims of fact

- He informs us of _____.
- She describes _____.
- They note that _____.
- He observes that _____.
- She explains that _____.
- The writer points out the way in which _____.

Describing Claims of Value

If the argument's main purpose is to convince us that something is bad or good or of mixed value, we can signal that evaluation to the reader right off the bat. How dramatic is the claim about its praise or critique? We can ask ourselves how many stars the argument is giving the thing it evaluates. A five-star rating "celebrates" or "applauds" its subject while a four-star rating might be said to "endorse it with some reservations."

Phrases to describe a positive claim of value

- They praise _____.
- He celebrates _____.
- She applauds the notion that _____.
- They endorse _____.
- He admires _____.
- She finds value in _____.
- They rave about _____.

Phrases to describe a negative claim of value

- The author criticizes _____.
- She deplores _____.
- He finds fault in _____.
- They regret that _____.
- They complain that _____.
- The authors are disappointed in _____.

Phrases to describe a mixed claim of value

- The author gives a mixed review of _____.
- She sees strengths and weaknesses in _____.
- They endorse _____ with some reservations.
- He praises _____ while finding some fault in _____.
- The authors have mixed feelings about _____. On the one hand, they are impressed by _____, but on the other hand, they find much to be desired in _____.

Describing Claims of Policy

If, as in the case of our sample argument, the author wants to push for some kind of action, then we can signal to the reader how sure the writer seems of the recommendation and how much urgency they feel. Since the border argument uses words like “must” and “justice” in its final paragraph, we will want to convey that sense of moral conviction if we can, with a verb like “urges.” Here is one possible first sentence of a summary of that argument:

In her 2019 article “Wouldn’t We All Cross the Border?”, Anna Mills urges us to seek a new border policy that helps desperate migrants rather than criminalizing them.

If we think there should be even more sense of urgency, we might choose the verb “demands.” “Demands” would make Mills seem more insistent, possibly pushy. Is she that insistent? We will want to glance back at the original, probably many times, to double-check that our word choice fits.

If the border argument ended with a more restrained tone, as if to convey politeness and humility or even uncertainty, we might summarize it with a sentence like the following:

In her 2019 article ‘Wouldn’t We All Cross the Border?’, Anna Mills asks us to consider how we can change border policy to help desperate undocumented migrants rather than criminalizing them.

Phrases to describe a strongly felt claim of policy

- They advocate for_____.
- She recommends_____.
- They encourage_____to _____.
- The writers urge_____.
- The author is promoting_____.
- He calls for_____.
- She demands_____.

Phrases to describe a more tentative claim of policy

- He suggests_____.
- The researchers explore the possibility of_____.
- They hope that_____can take action to_____.
- She shows why we should give more thought to developing a plan to_____.
- The writer asks us to consider_____.

Elaborating on the Main Claim

Depending on the length of the summary we are writing, we may add in additional sentences to further clarify the argument’s main claim. In the border argument example, the summary we have thus far focuses on the idea of helping migrants, but the argument itself has another, related dimension which focuses on the attitudes we should take toward migrants. If we are asked to write only a very short summary, we might leave the explanation of the main claim as it is. If we have a little more leeway, we might add to it to reflect this nuance thus:

In her 2019 article “Wouldn’t We All Cross the Border?”, Anna Mills urges us to seek a new border policy that helps desperate undocumented migrants rather than criminalizing them. She calls for a shift away from blame toward respect and empathy, questioning the very idea that crossing illegally is wrong.

Of course, the border argument is short, and we have given an even briefer summary of it. College courses will also ask us to summarize longer, multi-part arguments or even a whole book. In that case, we will need to summarize each sub-section of the argument as its own claim.

Practice Exercise 3.2.13.2.1

For each claim below, decide whether it is a claim of fact, value, or policy. Write a paraphrase of each claim and introduce it with a phrase that helps us see the writer's purpose.

- Students should embrace coffee to help them study.
 - Coffee is the most powerful, safe substance available to jumpstart the mind.
 - Coffee's effect is universal.
 - For those of us who believe in the life of the mind, enhancing our brains' abilities is ultimately worth the occasional discomfort associated with coffee.
-

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3.2: Describing the Reasoning

Once we have introduced the argument we will summarize and described its main claim, we will need to show how it supports this claim. How does the writer point us in the direction they want us to go? Whereas we used an arrow in the argument map to show momentum from reason to claim, we can use a phrase to signal which idea serves as a reason for which claim.

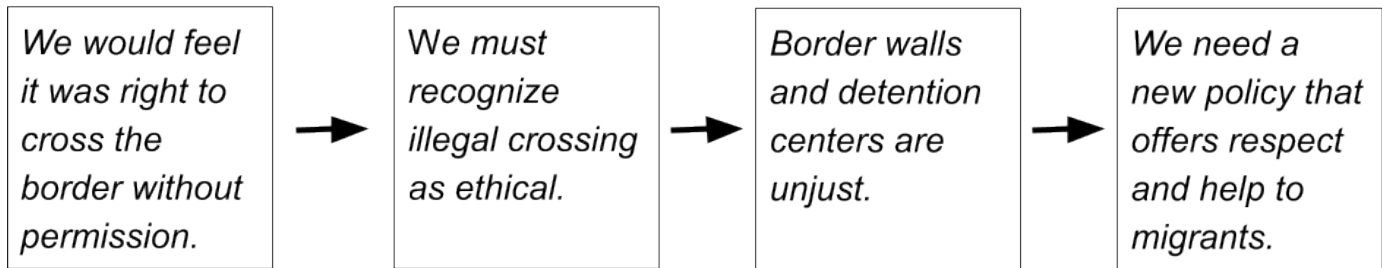


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Phrases for Introducing Reasons

- She reasons that _____.
- He explains this by _____.
- The author justifies this with _____.
- To support this perspective, the author points out that _____.
- The writer bases this claim on the idea that _____.
- They argue that _____ implies that _____ because _____.
- She argues that if _____, then _____.
- He claims that _____ necessarily means that _____.
- She substantiates this idea by _____.
- He supports this idea by _____.
- The writer gives evidence in the form of _____.
- They back this up with _____.
- She demonstrates this by _____.
- He proves attempts to prove this by _____.
- They cite studies of _____.
- On the basis of _____, she concludes that _____.

Our border argument map shows a chain of three reasons leading to the main claim, so our summary can describe that chain.



Sample summary

In her 2019 article “Wouldn’t We All Cross the Border?”, Anna Mills urges us to seek a new border policy that helps desperate undocumented migrants rather than criminalizing them. She calls for a shift toward respect and empathy, questioning the very idea that crossing illegally is wrong. She argues that any parent in a desperate position would consider it right to cross for their child’s sake; therefore, no person should condemn that action in another. Since we cannot justify our current walls and detention centers, we must get rid of them.

Practice Exercise 3.3.13.3.1

For each pair of claims and reasons below, write a paraphrase of the reason and introduce it with one of the phrases from the chapter or another phrase that serves a similar purpose.

Here’s an example. Take the following claim and reason pair: “The right of free speech does not apply to speech that endangers public health. Therefore, Twitter should not allow tweets that promote medical claims that have been proven wrong.”

A description of the reason might read as follows: “The writer bases this recommendation on the idea that we do not have a free-speech right to spread ideas that harm other people’s health.”

1. "Coffee jumpstarts the mind. Therefore, students should embrace coffee to help them study."
2. "Students should avoid coffee. Relying on willpower alone to study reinforces important values like responsibility and self-reliance."
3. "Students should drink black tea rather than coffee because tea has fewer side effects."

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3.03: Describing the Reasoning

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3.3: Describing How the Author Treats Counterarguments

If the argument we are summarizing mentions a counterargument, a summary will need to describe how the author handles it. A phrase introducing the author's treatment of the counterargument can signal whether the writer sees some merit in the counterargument or rejects it entirely. In either case, we will almost always want to follow up by describing the author's response. If the writer sees merit in the objection, we need to explain why they still maintain their position. On the other hand, if the author dismisses the counterargument, we need to show how they justify this dismissal.



If a writer rejects a counterargument entirely, we can point that out when we summarize. Photo by [Anete Lusina](#) on [Pexels](#) under the [Pexels License](#).

Phrases to Introduce a Writer's Handling of a Counterargument

If the Author Sees Some Merit in the Counterargument

- The writer acknowledges that _____, but still insists that _____.
- They concede that _____; however they consider that _____.
- He grants the idea that _____, yet still maintains that _____.
- She admits that _____, but she points out that _____.
- The author sees merit in the idea that _____, but cannot accept _____.
- Even though he sympathizes with those who believe _____, the author emphasizes that _____.

If the Author Rejects the Counterargument Entirely

- She refutes this claim by arguing that _____.
- However, he questions the very idea that _____, observing that _____.
- She disagrees with the claim that _____ because _____.
- They challenge the idea that _____ by arguing that _____.
- He rejects the argument that _____, claiming that _____.
- She defends her position against those who claim _____ by explaining that _____.

In the case of the sample border argument, we might summarize the treatment of the counterargument thus:

Mills acknowledges that opening the borders completely would compromise security, but she believes that we can “regulate” our borders without blocking or imprisoning migrants.

Note the choice here to quote the one word “regulate” instead of paraphrasing or using the word without quotation marks. The quotation marks draw attention to the author’s original word choice and suggest there may be a problem or question about this word choice. In this case, the summary might observe that the writer does not specify what kind of regulation she means.

Practice Exercise 3.4.13.4.1

Below are two sample paragraphs in which an author describes a counterargument. For each description, decide whether the author sees some merit in the counterargument or not (see [2.6](#)). Choose a phrase from the suggestions above to help you summarize the author’s handling of the counterargument.

1. Not everyone agrees with my celebration of coffee. Some object that ingesting substances to help us study leads to addiction. They worry that even a boost to mental functioning will ultimately hurt us because it encourages us to try to fix our mind with substances any time we feel out of sorts. This argument, however, is nothing short of paranoid. It would result in some ridiculous conclusions. By its logic, we should not drink water when we’re thirsty because we will become addicted.
2. Many feel that black tea is a better choice than coffee, arguing that it can improve performance just as well with fewer side effects. This depends on the individual, though. While black tea is worth considering, remember that it can also have side effects, and for many, it simply will not give enough of a boost to the brain.

[3.04: Describing How the Author Treats Counterarguments](#)

3.4: Describing How the Author Limits the Claim

In the course of describing the author's claims, reasons, and counterarguments, chances are we will already have mentioned some limits or clarified which kinds of cases an author is referring to. It is worth checking, however, to make sure we haven't left out any key limitations the author has identified.



An argument may focus on particular cases and exclude others, as a frame can direct our attention to one part of a view.

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Phrases to Describe the Way a Writer Limits an Argument

- He qualifies his position by_____.
- She limits her claim by_____.
- They clarify that this only holds if _____.
- The author restricts their claim to cases where_____.
- He makes an exception for_____.

In the case of the border argument, the writer responds to the counterargument about security by clarifying that she does not advocate completely open borders. The sample summary already refers to this when it describes her desire to “regulate” those borders. In addition, when the summary paraphrases her claims and reasons, it uses the phrases “desperate” and “in a desperate position” to show how she limits the focus to migrants who are fleeing an awful situation.

Practice Exercise 3.5.13.5.1

Below are some sample claims that mention limits. Choose one of the phrases above or create another one with a similar purpose to help you summarize each claim and limit.

1. Students should embrace coffee to enhance mental functioning unless they are in the minority of people who experience severe side effects of coffee like anxiety, insomnia, tremors, acid reflux, or a compulsion to drink more and more.
2. Students shouldn't hesitate to enjoy coffee as long as they keep exercising and sleeping well enough to maintain their mental and physical health.
3. In moderation, coffee can be part of a healthy lifestyle.

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3.5: Putting the Summary Together

How can we turn the descriptions of the claims, reasons, counterarguments, and limitations into a cohesive paragraph, page, or essay that we can turn in as our summary? The good news is that by introducing each part of the argument to show how it relates to the others, we have already provided many of the transitions we need. We can generate a first draft of the summary by simply putting them all together in order.

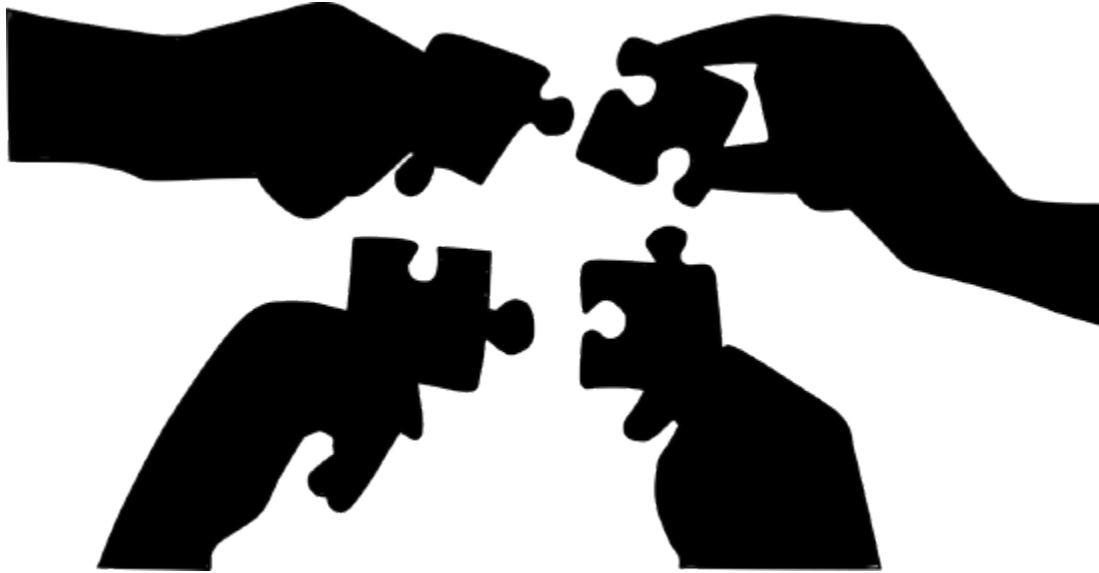


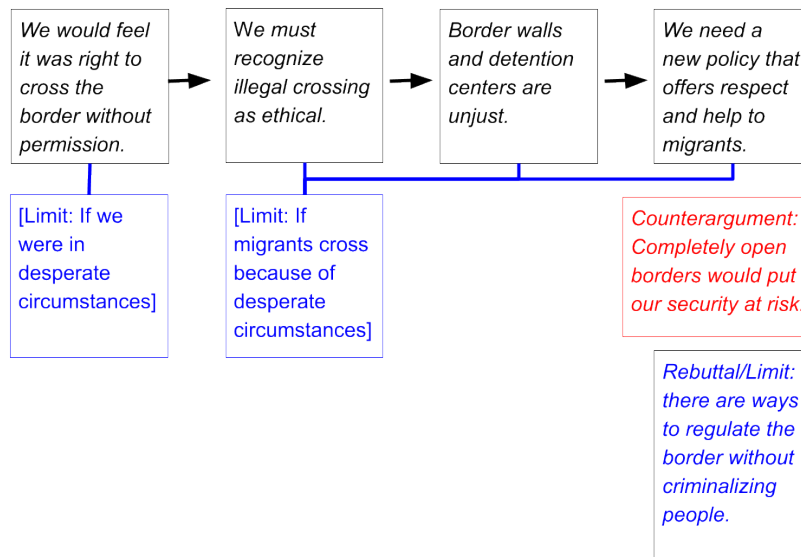
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Here is an example of a summary draft that describes the border argument:

Sample Summary

In her 2019 article “Wouldn’t We All Cross the Border?”, Anna Mills urges readers to seek a new border policy that helps desperate undocumented migrants rather than criminalizing them. She calls for a shift toward respect and empathy, questioning the very idea that crossing illegally is wrong. Mills argues that any parent in a desperate position would consider it right to cross for their child’s sake; therefore, no person should condemn that action in another. Since we cannot justify our current walls and detention centers, we must get rid of them. She acknowledges that opening the borders completely would compromise security, but believes that we can still “regulate” our borders without blocking or imprisoning migrants.

Next, we can review our border argument map to make sure that we have covered the main parts of the argument.



"Argument Map with Limits" by Anna Mills is licensed [CC BY-NC 4.0](#).
See the [accessible text description of the argument map with limits](#).

If we are writing a longer summary of an extended argument, our map and our knowledge of the role of each part of the text will help us organize the essay into paragraphs and transition between them. For example, in a three-page summary of a twenty-five-page essay, we might spend a full paragraph on the author's description of a counterargument and yet another paragraph on the author's rebuttal to this counterargument. To open this paragraph, we could refer to our earlier list of [templates for describing a response to a counterargument](#).

Practice Exercise 3.6.13.6.1

Summarize the argument below in a few sentences that introduce each element of the argument and its role. If you completed the exercises for the earlier sections in this chapter, you may use some of those answers to those to help you put together this paragraph.

Coffee is a blessing to students. What better way is there to jumpstart the mind and help us engage with our studies? The benefits of coffee are well known, and yet some hold back from it unnecessarily. Some feel that black tea is a better choice, arguing that it can still boost mental performance with fewer side effects. This depends on the individual. While black tea is worth considering, remember that it still comes with side effects, and for many, it simply will not give enough of a boost to the brain. For those of us who believe in the life of the mind, enhancing our brains' abilities is ultimately of more value than avoiding the occasional minor discomfort. Of course, a few people who experience severe side effects like anxiety, insomnia, or tremors should avoid coffee. For most, though, we can drink coffee in moderation and still feel healthy, as long as we exercise and sleep well. Some object to coffee because they believe that ingesting any substance to help us study leads to addiction. They worry that even a boost to mental functioning will ultimately hurt us because it encourages us to try to fix our mind with substances any time we feel out of sorts. This argument, however, is nothing short of paranoid. It would result in some ridiculous conclusions. By its logic, if we drink water when we're thirsty, we will end up addicted. If you haven't given coffee a fair try under the right circumstances, don't deprive yourself out of fear. Chances are you can do better work and enjoy it more with a moderate coffee habit. Why let life's "Aha" moments pass you by?

3.06: Putting the Summary Together

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4: ASSESSING THE STRENGTH OF AN ARGUMENT

4.1: Using a Summary to Launch an Opinion

4.2: Checking If the Meaning Is Clear

4.3: Questioning the Reasons

4.4: Questioning the Assumptions

4.5: Fallacies- Common Problems to Watch For

4.5.1: Classification of Fallacies - All the Ways we Say Things Wrong

4.5.2: Fallacies of Evidence

4.5.3: Fallacies of Weak Induction

4.5.4: Fallacies of Ambiguity and Grammatical Analogy

4.5.5: The Detection of Fallacies in Ordinary Language

4.5.6: Searching Your Essays for Fallacies

4.1: Using a Summary to Launch an Opinion

Media Alternative

Listen to an audio version of this page (4 min, 22 sec):

In Chapters 2 and 3, we have analyzed and summarized arguments but restrained ourselves from offering our own opinions. When reading through an argument, we naturally ask ourselves whether we agree or disagree as we go. We may be writing exclamation marks or expressions of outrage in the margins, or we may be feeling uneasy because we are not sure yet what we think. Either way, we are probably impatient to find our own voice. When do we get to weigh in? Once our readers understand the original text and trust that we understand it, they are in our hands, ready to listen to our assessment. Our critique will be clearer since we have spent time thinking about the foundations of the argument and the author's purpose and meaning. The work we have done puts us in the best position to add something of our own to the conversation.



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Most college essay assignments do ask us to critically evaluate arguments, not just summarize them. To give a taste of what these kinds of assignments look like and how common they are, let's turn to courses at the Massachusetts Institute of Technology, a highly regarded university specializing in engineering, science, mathematics, and technology. We might not expect MIT to emphasize writing skills, but the assignments in its publicly available "Open Courseware" frequently ask students to critically evaluate arguments. Here are four examples:

1. A prompt from the MIT course "American History Since 1865," taught by professor Caley Horan, reads as follows:

The historian Eric Foner argues that Reconstruction should be understood as an "unfinished revolution." In what ways, if any, were the American Civil War and the Reconstruction period that followed revolutionary, and for whom? What was left "unfinished" by Reconstruction? Essays should present an original argument that responds to the above prompt. This argument should be unique (of your own making) and should reflect careful and serious engagement with course materials.

2. In the economics course "The Challenge of World Poverty" at MIT, students are asked to write an essay on the following topic:

Despite being quite poor, China currently has a savings rate that is much higher than most other countries in the world. An [article by Shang-Jin Wei in VoxEU](#) proposes one interesting reason why Chinese households tend to save so much. Do you find the article's evidence plausible? What other factors may explain why initially poor East Asian countries have saved at very high rates over the past sixty years?

3. A third prompt comes from the MIT course “Globalization: the Good, the Bad, and the In-Between”:

In his introduction to *The Ornament of the World*, Harold Bloom says: “...Our current multiculturalism, the blight of our universities and of our media, is a parody of the culture of Cordoba and Granada in their lost prime.” What does Bloom mean? Is multiculturalism today different from the tolerance exhibited by the societies of Al-Andalus? Do you agree with him? Argue either for or against Bloom's position.

4. Finally, an experimental biology class demands the following:

Write a brief critique (2-3 pp.) of Arbuckle, Melissa R., et al. "Development of Autoantibodies before the Clinical Onset of Systemic Lupus Erythematosus" from *The New England Journal of Medicine*, focusing on the illustrations.

All four of these essay prompts direct the student to focus deeply on one argument and explain it. Then the student must express an original critical response. This is in some ways similar to a movie review: a reviewer has to give some picture of what the movie is like before praising or panning it. We might not think of history, economics, and biology courses as all calling on one skill, but the student who has practice summarizing arguments and critiquing them can likely do well on all of the above assignments.

So how do we get started? In this chapter, we will discuss how to return to the structure of the argument map to search for any faults. We will look at problems with the clarity of the claims, the solidity of the reasons, and the validity of the assumptions. In the next chapter, we will talk about the options for making recommendations in response to any problems we find.

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4.2: Checking If the Meaning Is Clear

Media Alternative

Listen to an audio version of this page (10 min, 58 sec):

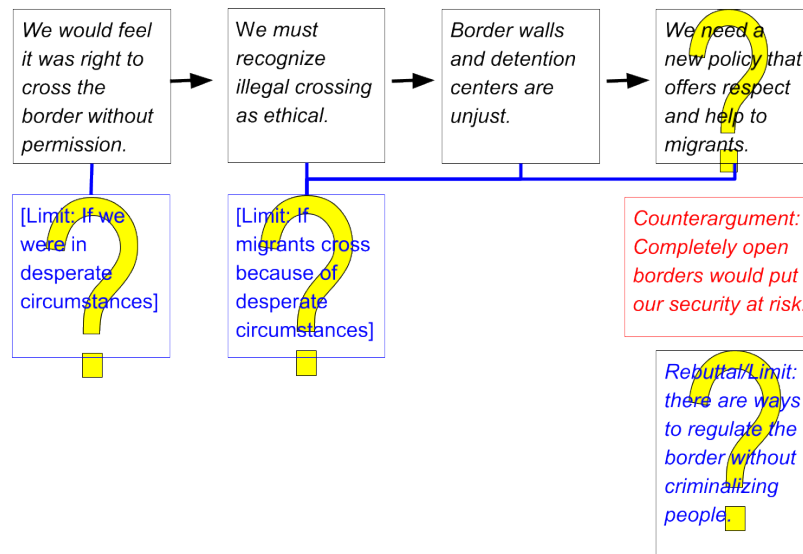
Overview

Sometimes we can identify the point a writer is trying to make, but major questions still remain about what the writer means. A critique can point out the **ambiguity**—the many possible meanings of some part of the argument. Often arguments are ambiguous because they use words or phrases that have multiple definitions. For example, “We should all support reproductive justice.” There isn’t one widely accepted definition of reproductive justice. Even if readers are aware that the phrase refers to options different groups of women have around pregnancy, they may be wondering if it means access to abortion across racial and economic groups or access to birth control or sex education or some combination of all of those. Are supporters of reproductive justice always pro-choice? What is it exactly that the argument is asking us to support?



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Let’s look at the elements of the border argument we have studied and ask ourselves if any of the statements need to be clarified. Below, question marks indicate statements that are in some way ambiguous.



In our assessment, we can describe any areas of ambiguity by adding questions to our summary of the argument. Let's look at some sample writing about the ambiguities marked with question marks in the map above.

- When the author limits her claim to migrants in “desperate circumstances,” what does she mean? She describes this in different words in different places, calling the migrants people “who are driven by need and good intentions” and giving the example of a parent “raising children in an impoverished third-world community plagued by violence.” But we might find it important to ask where she draws the line between desperation and discontent. Does she want to check first to see how desperate migrants are? Would she consider it appropriate to put an immigrant in a detention center for trying to cross illegally if they were wealthy and safe in their country of origin?
- What does she mean by “help”? The word makes us think of humanitarian relief: handouts of food, shelter, and medical care. How much material assistance is she talking about and how much money does she think the United States should spend on this? Doesn't the current system provide some material assistance, in part through the detention centers? More fundamentally, does “help” mean that she wants us to let migrants in? Would she still consider it “help” to assist them to settle in another country or to improve their life in their country of origin? How would either of those versions of “help” work? We might imply that she should specify her meaning. Or we might suggest that she left the concept of “help” ambiguous because there is no good answer to these questions: there is no satisfactory way to offer people a better life where they came from, and we cannot endlessly support them at the border.
- What does she mean by “regulate”? The word sounds reassuring, but it implies some control and yet she is talking about not keeping people out. If you can't turn people away, what kind of control or safety guarantee can you have? Does she just mean inspecting them for arms and drugs? Or does she mean some kind of extensive background check? But in that case, wouldn't we need detention centers while we waited for the result?

Phrases for pointing out what is not clear

We do not need any special vocabulary to point out ambiguity, but sometimes seeing typical phrases can help jumpstart our thinking. Here are some approaches:

Ask a question

- What exactly does she mean by _____?

Describe the author's actions and shortcomings

- He seems to imply that _____, but leaves ambiguous whether or not that means_____.
- They fail to clarify what exactly _____ refers to.
- He does not define what he means by _____.
- She explores _____, but fails to articulate a clear message.

Refer to the argument's failure to clarify

- This leaves open the question of _____.
- The argument never specifies whether _____ or _____.

Refer to readers' probable confusion

- Readers will wonder if they mean_____ or _____.
- Readers may be confused by the shifting meaning of the term "_____."
- Many will interpret _____ to mean _____, but some might also take it to mean _____.

How much of a problem is the lack of clarity?

Since our goal in an assessment is to decide how effective we think the argument will be at getting its point across, any charge of vagueness implies some failure to communicate that point. This becomes a critique. But is it a minor flaw in the argument, or does it mean that the whole argument has no validity? The seriousness of the critique depends on how central the lack of clarity is to what the writer is trying to claim in the argument and whether there is an obvious way to clarify the argument or not.

Sometimes we can make an educated guess as to what the author meant based on clues we find in the rest of the argument. We can describe what the most likely meaning is but still note why readers might reasonably have another interpretation. Sometimes it isn't possible to figure out what the author means. In our assessment, we just have to put our finger on what isn't clear.

The lack of clarity may not be a serious flaw if we can make a reasonable guess as to what the author intends based on the rest of the argument. We can simply point out such a case:

- The writer does not specify whether _____ or _____, but we can infer that _____ because _____.

It also may not be too serious if it is a side point rather than a central point that needs to be clarified. In that case, we might want to think about how one clarification or another might affect our assessment. We can specify in our assessment that we support the argument if it means what we think it means but not if it means something else.

However, sometimes the vagueness covers a fatal flaw in the argument, a difficulty, contradiction, or gap that cannot be explained away. One particular kind of ambiguity that undermines the argument is when the writer uses a word in two different ways while acting as if it only has one meaning. A change in a word's meaning, whether intentional or not, can lead to an unjustified conclusion. This is called **equivocation**.

For example, consider the following paraphrase of an example found on fallacyfiles.org:

"No medical professional should be allowed to intentionally harm a human. What is a fetus if not human? How, then, can anyone dispute that abortion is wrong and should be illegal?"

There may or may not be legitimate reasons to oppose legal abortion. However, the above argument does not hold up because it depends on a sleight of hand, a shift from the idea of a human, meaning a human being, to the adjective "human," which can apply to anything with human cells and DNA, including hair and toenails. We can tell that the above argument is faulty if we substitute "fetus" for "hair" to construct a similar argument:

"No medical professional should be allowed to intentionally harm a human. Surely our hair and fingernails are human, not animal. Therefore cutting hair and nails should be illegal."

The question any argument about abortion needs to resolve, of course, is whether a fetus can be considered a human being, not whether a fetus has human cells. So this ambiguity of meaning means that the reason and the claim are not talking about the same thing. The reason doesn't really lead to the claim.

In our assessment, we need to indicate how much of a problem the vagueness is for the overall validity of the argument.

- This ambiguity undermines the author's claim that _____.
- Without knowing _____, we cannot conclude that the author is right that _____.

Practice Exercise 4.2.1

In a few sentences, give your opinion on an issue related to current events. Make a short argument with a claim and at least one reason. Then, exchange arguments with a classmate. Read your classmate's argument and write down at least one clarifying question. Can you imagine a way in which two readers could get different ideas about what they mean based on what they wrote? Is there a term they are using that could mean more than one thing?

Here are some ideas for phrasing such direct requests for clarification:

- You seem to imply that _____, but I wasn't sure whether or not that means _____.
- Can you clarify what you're referring to when you say _____?
- Could you define the term _____? Some might think of _____, while others could imagine you mean _____.
- I'm interested in the way you explore the issue of _____, but I wasn't sure I understood what you wanted to argue in the end. Did you mean _____?
- I wondered if you meant _____ or _____.

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4.3: Questioning the Reasons

Media Alternative

Listen to an audio version of this page (7 min, 8 sec):

Why are generalizations important to arguments?

In order to make a point that is worth making, we may need facts or evidence, but we will also need ways to connect those specifics to bigger points or other related specifics. A generalization tells us that something is true for a group of cases that have something in common.

Find the generalizations and question them

We can check an argument by looking for possible exceptions to any **generalization** it makes. If we see a general statement, we should ask ourselves whether it is always true or whether we can identify any case that doesn't fit the pattern. If there is an exception that the argument hasn't accounted for, that may point us to a weak spot that we should mention in our assessment. Often, a particular claim or reason may sound plausible, but we need to slow down and ask if it is true in all cases. For example, take the following argument:

The First Amendment guarantees the right of free speech to all Americans. Therefore, teachers have the right to express themselves freely in the classroom.

But is the general statement always true? Does the First Amendment really guarantee absolute freedom to say whatever we want in any situation? U.S. courts have recognized many exceptions to this freedom. For example, doctors are not allowed to discuss confidential patient information without permission. No one is allowed to call for immediate acts of violence. Teachers may not tell students to go out and shoot the president. "Hate speech" is also prohibited: a teacher does not have the right to spout racial slurs. Another exception that applies to this case is not so widely known: the First Amendment does not apply when a person is working for an employer. Unless there is a local law protecting employee speech, an employer can tell workers what they are and are not allowed to say on the job.

The original argument does not mention any of these exceptions. By pointing this out, we can show that the argument as expressed is invalid. If it isn't always true that the First Amendment guarantees freedom of speech, then we cannot necessarily conclude that teachers in classrooms are guaranteed freedom of speech.

Exceptions are not always so damaging to an argument. For example, let's take the following argument:

Across the country, we have seen so many cases of teachers openly expressing their political beliefs in the classroom. This country's teachers behave as if their First Amendment rights extend to the workplace, but indoctrinating students is an abuse of power.

We can surely think of teachers who do not express political beliefs in the classroom. An assessment could critique this argument for not acknowledging that. However, there may well still be enough examples of teachers expressing political beliefs to claim that there is a trend. The entire argument is not invalidated just because there are counterexamples. As we saw in [Section 2.8: Finding the Limits on the Argument](#), many arguments limit their claims to acknowledge exceptions. The claim in the example above would need to be limited, perhaps by revising the central claim to "many of this country's teachers" in front of "teachers." Of course, the validity would still depend on whether there really are so many such cases.

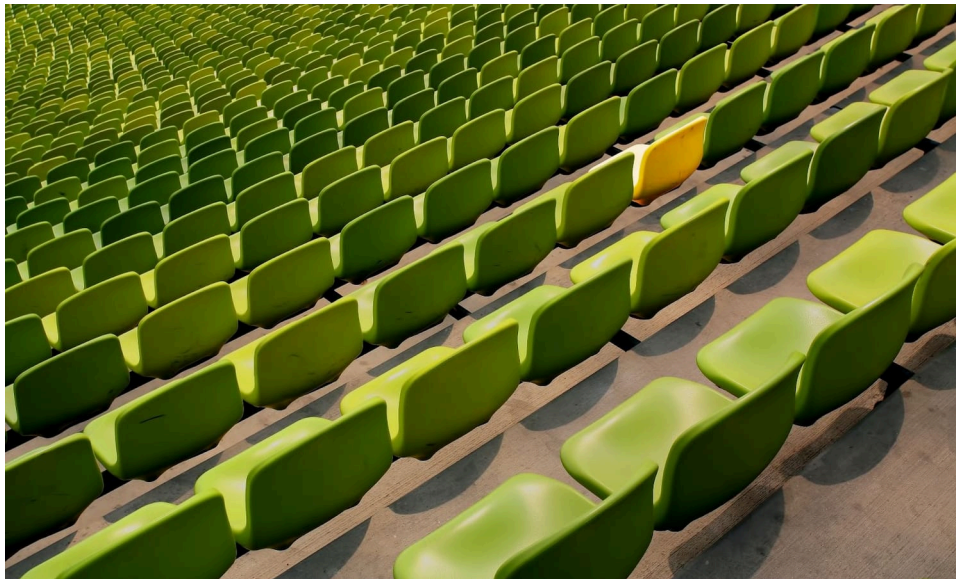


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Phrases for pointing out exceptions

Here are some sample ways to critique an argument for ignoring a plausible exception:

- The argument is based on the idea that _____, but this is not entirely true because _____.
- The reason given is that _____, but the author has not considered the possibility that, in fact, _____.
- The author does not acknowledge that _____ might be the case.

Common ways that arguments that leave out exceptions

We can look for exceptions with any argument, but there are some patterns worth learning about so we can spot them quickly.

Arguments that start with generalizations (deductive arguments)

Arguments that start with a generalization and apply it to a specific case or cases are known as **deductive** arguments. If it turns out the generalization is not true, then it certainly won't apply to specific cases. For example, the argument given above about teachers' right to free speech starts with a general statement about a right of all Americans to free speech and applies it to a specific group (teachers) in a specific setting (the classroom). Once we identified exceptions to the general right to free speech, we could no longer be sure that teachers in classrooms have that right, at least not based on the generalization about free speech.

Arguments that start with examples (inductive arguments)

An argument that uses examples to make a general claim is called an **inductive argument**. If it turns out that the general claim has exceptions, we may be able to limit it to account for those, as we saw above. There we observed that changing the claim from "this country's teachers" to "many of this country's teachers" would account for the exceptions, teachers who did not fit the generalization.

False dilemmas

Sometimes an argument asserts that there are only two or three options, when in fact there may be others. This is often called a **false dilemma** or **false choice** fallacy. If the writer is arguing for something that obviously has downsides, they may present it

as the lesser of two evils. However, we should always ask whether those two are really the only options. For example, consider the following argument:

Americans are faced with a choice: either we open our borders or we turn our backs on the needs of desperate people. Clearly, the only ethical course is to open our borders.

There are other ways to try to help desperate people. As a country, we give billions in direct aid and security assistance to struggling countries every year and could conceivably give more to the countries migrants are escaping. Other possible options would be to establish refugee camps at the border, or to allow people to enter the U.S. temporarily but not permanently. These options may or may not be good ones, but the point is that the way this argument has presented the choice as an either/or is misleading.

Here is a sample way to point out a false dilemma:

- The argument presents only two possibilities, _____ and _____, when in fact it could be the case that _____

Loaded questions

Sometimes a false dilemma is implied when an argument asks a question with an obvious answer, a question phrased in such a way that it pushes us to agree with the author without examining the real range of possibilities. This **loaded question** implies that there are only two options, one of them very bad. As an example, we can reframe the statement from the false dilemma example as a question and answer:

Can we justify turning our backs on the needs of desperate people? There is no justification for such selfishness. The time has come to open our borders.

The argument would be more transparent and less manipulative if it tried to prove that other ways of helping desperate people, such as direct aid in people's countries of origin, would not do enough.

We can critique a loaded question with a sentence like this:

The question _____ assumes that _____, when, in fact, it could be that _____.

Exercise 4.3.1

Consider the following argument: "Technology is so much a part of all aspects of our lives now that we cannot do without it."

- What exceptions could you point out to either the claim, "We cannot do without it," or the reason, "Technology is so much a part of all aspects of our lives now"?
- Use one of the phrases from this section or a phrase of your own to critique the argument.
- Would the argument be valid if it just narrowed its focus? Or does the exception reveal a fundamental problem with the argument?

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4.4: Questioning the Assumptions

Media Alternative

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Is there enough evidence?

An argument may not have obvious exceptions, but we should still ask whether it gives enough evidence to convince us of the claim. The reason is the foundation of the argument: is the foundation secure? In some cases we may suspect that some part of the reason is not true, and in others we may simply want to note that little or no evidence has been offered. For example, the border argument we have examined makes two claims without any evidence: "Completely open borders would put our security at risk" and "There are ways to regulate the border without criminalizing people."

The evidence may lack substance (circular reasoning)

Sometimes a reason given is not really a reason at all, just a repetition of the claim itself in different words. In effect, the writer asks us to believe an idea because of that very same idea. This is called **circular reasoning** or "begging the question."

For example, consider the following argument:

Anyone born in the United States has a right to citizenship because citizenship rights here depend on birth, not ethnicity or family history of immigration.

The idea that "anyone born in the United States has a right to citizenship" and the idea that "citizenship rights here depend on birth" are really one and the same. We still need a reason to accept this focus on birth as the determining factor.

Circular reasoning is often not deliberate. In reaching to explain the reason for a deeply held belief, a writer may end up summarizing that belief again in a different way. Other times the writer may knowingly perform this sleight of hand, hoping the reader will not notice. In either case, the argument lacks substantive support.

We can critique circular reasoning with phrases like the following:

- The argument presents _____ as a reason to believe _____, but this supposed reason is just a rewording of the claim.
- The writer provides no real justification for the idea that _____; to convince us they just repeat that idea with different phrasing.

The evidence may not be representative (hasty generalization)

Most academic arguments explore evidence in the form of specific examples, facts, statistics, testimonials, or anecdotes in order to arrive at a general conclusion. This is called **inductive reasoning**.

If an argument gives evidence, we need to know if the evidence is enough. A few examples may not be representative of a general pattern. If the argument makes a sweeping generalization based on one or two anecdotes or solely on the writer's own experience, it can be considered a **hasty generalization**.

How do we decide when the evidence is enough? The science of statistics addresses this question in very specific, technical ways that are worth learning but beyond the scope of this book. Often, however, an intuitive assessment will be enough. We all probably already guard against this fallacy when we search online for products that have been reviewed many times. Clearly one five-star review could be a fluke, but 2,000 reviews averaging 4 1/2 stars is a more reliable indicator.

People who deny that global warming is a genuine phenomenon often commit this fallacy. In February of 2015, the weather was unusually cold in Washington, DC. Senator James Inhofe of Oklahoma famously took to the Senate floor wielding a snowball. “In case we have forgotten, because we keep hearing that 2014 has been the warmest year on record, I ask the chair, ‘You know what this is?’ It’s a snowball, from outside here. So it’s very, very cold out. Very unseasonable.”

Senator Inhofe commits the hasty generalization fallacy. He’s trying to establish a general conclusion—that 2014 wasn’t the warmest year on record, or that global warming isn’t really happening. But the evidence he presents is insufficient to support such a claim. His evidence is an unseasonable coldness in a single place on the planet, on a single day. We can’t derive from that one example any conclusions about what’s happening, temperature-wise, on the entire planet, over a long period of time. The claim that the earth is warming is not a claim that everywhere, at every time, it will always be warmer than it was. The claim is that, on average, across the globe, temperatures are rising. Cold snaps can happen even if temperatures are rising.

A particularly damaging example of the hasty generalization fallacy is the development of negative **stereotypes**. Stereotypes are general claims about religious or racial groups, ethnicities and nationalities. Even if we do have evidence that a certain trait is more common among people of one ethnicity, we still cannot assume that a particular individual of that ethnicity will have the trait.

A specific form of hasty generalization is when an author will point to a lack of evidence as a sign that no evidence is out there. This fallacy is often called **appeal to ignorance** because the arguer is citing their own lack of knowledge as the basis for their argument.

For example, consider the following: “No one I know has heard about any anti-Asian violence lately; therefore, reports of such violence are exaggerated.” The speaker and their acquaintances may simply not have come in contact with the people who have experienced such incidents of violence.

Absence of evidence can sometimes tell us something useful. It may be a reason to doubt the conclusion even if it doesn’t disprove it. During the 2016 presidential campaign, reporter David Fahrenthold took to Twitter to announce that despite having “spent weeks looking for proof that [Donald Trump] really does give millions of his own [money] to charity...” he could only find one donation, to the NYC Police Athletic League. Trump has claimed to have given millions of dollars to charities over the years. Does this reporter’s failure to find evidence of such giving prove that Trump’s claims about his charitable donations are false? No. To draw such a conclusion relying only on this reporter’s testimony would be to commit the fallacy.

However, the failure to uncover evidence of charitable giving does provide some reason to suspect Trump’s claims may be false. How much of a reason depends on the reporter’s methods and credibility, among other things. In fact, Fahrenthold subsequently performed and documented in the *Washington Post* on 9/12/16 a rather exhaustive unsuccessful search for evidence of charitable giving, providing strong support for the conclusion that Trump didn’t give as he’d claimed.

Is the evidence trustworthy?

If the writer has offered evidence, we should ask ourselves whether it is credible. Can it be verified? The validity depends on the source. Is the evidence from trustworthy sources? For example, if the argument cites a statistic from the Pew Research Center, we need to know whether that institution is credible. Is it biased? Does it try to promote a particular product or ideology? Do experts in the field review its studies? If we are not familiar with the source, we can look it up online and include this information in our assessment. We will discuss assessing the credibility of sources much more in [Chapter 6: The Research Process](#) and also in [Chapter 9: How Arguments Establish Trust and Connection \(Ethos\)](#).

Is there enough variety in the evidence?

There are different kinds of evidence and each kind has its limitations as far as what it can show. Thus, arguments are often most convincing when they provide a variety of kinds of evidence. For example, an anecdote might give a sense of how difficult an immigrant’s situation in their country of origin may be, but a statistic on how common that difficulty is will be needed to show that the anecdote is typical of many others’ experiences as well. In your assessment, you may want to note the limitations of the evidence offered and point out another kind of evidence that would complement it. Are there enough statistics, anecdotes, or testimonials? Is there enough variety in the kinds of evidence? There isn’t a set formula for what’s needed; the question is whether the readers should be convinced that any claim that makes up part of the argument is valid.

Types of evidence and their limitations

Facts

Facts are statements that can be independently verified. For example, an argument might state that “According to the Pew Research Center, the United States has more immigrants than any other country.” We could theoretically check whether the Pew Research Center issued this statement and also check whether it is true based on the census of each country as well as other population estimates.

Statistics

Statistics are numbers that are used to describe a pattern. They often represent information about a large number of cases of a given phenomenon, so they may be more convincing because they are more likely to represent a general trend than one or two cases might be. If the statistics are accurate and relevant, they can provide strong support. For example, an argument might cite evidence that according to the Pew Research Center, “immigrants today account for 13.6% of the U.S. population.” Statistics have an air of authority because they quantify things, making them and the claim they support sound indisputable. For this reason, writers can be tempted to overuse them or to throw them in where they don’t really add to the logic of the argument. A famous book called *How to Lie with Statistics* by Darrell Huff goes over all the ways in which statistics can be used to mislead readers about the strength of a claim. We need to examine closely what a given statistic actually shows and exactly how it connects to the claim at stake in the argument. This will usually involve checking the assumptions made to link the statistic to the claim, as we will see in [Section 4.5: Check the Argument’s Assumptions](#).

Expert testimonials

Testimonial evidence can be convincing if it is collected from relevant authorities. Whether or not a testimonial is convincing depends not just on how well regarded the expert is but on how relevant their expertise is to the topic at hand. Who would be an expert source of a testimonial for an argument based on immigration? A social scientist? A philosopher? An immigration lawyer? We would want to question the testimony of a celebrity who has no special knowledge of immigration. In addition, we want to know if the expert’s perspective is representative of the opinion of others in the field. Is the person an extremist? Do they have a stake in promoting a particular product or position?

Statements from experts or organizations that represent a field of knowledge can be especially helpful in laying the foundation for a **deductive** argument, where we need a credible general principle as the foundation for a conclusion about a specific case. This can be especially helpful if we are looking to make a prediction about a future trend or the outcome of an experiment. We will need to cite experts to substantiate the general principle. But the question arises whether the experts really speak for the field and whether others have alternate expert interpretations of the pattern or draw other generalizations from the body of evidence.

For example, take the following general claim supported by expert testimony:

As psychiatrist Dr. Robert Spitzer of Columbia University told *The Washington Post* in 2001 that his study showed that, “some people can change from gay to straight, and we ought to acknowledge that.” It’s not impossible to convert to heterosexuality.

However, an inquiry into Dr. Robert Spitzer will show that his 2001 study was widely criticized by other psychiatrists and that he himself recanted the study and apologized for it in the journal of the American Psychiatric Association in 2012, writing, “I ... apologize to any gay person who wasted time and energy undergoing some form of reparative therapy because they believed that I had proven that reparative therapy works with some ‘highly motivated’ individuals.” An assessment could note that at the very least the argument should have mentioned this later apology when it quoted Spitzer.

Anecdotes

Anecdotes can illustrate a point with a story that makes it come to life. They are more compelling if they are based on first-hand accounts. Often these stories appeal strongly to readers’ emotions, and we will discuss in much more depth how to analyze and evaluate these appeals in [Chapter 8: How Arguments Appeal to Emotion](#). We should examine any story closely to see how opinions and assumptions may be woven into the storytelling. In our assessment, we may want to point out any possible bias or limitation of the person who provides the anecdote.

If anecdotes or specific examples are used to establish a general pattern, we can ask how the argument convinces us that these are typical. Sometimes statistics can help to establish this **typicality**.

Does the evidence really support the claim?

The argument may have offered some facts as evidence, and we may be ready to accept them as facts, but do they prove what the argument wants them to prove? Sound evidence can be used in misleading ways. As we'll see in [Section 4.5: Check the Argument's Assumptions](#), a reason depends on assumptions to prove a claim. If the assumptions are wrong, then the reason does not really prove the claim. This type of fallacy, or logical problem, can be called a **non sequitur**.

Is the claim too broad or too definite given the evidence?

Sometimes an argument makes a broad claim based on narrow evidence. In our assessment, we can comment on any mismatch between the scope of the claim and the scope of the evidence offered. We might suggest that the argument should limit its claim with a particular phrase such as with "few," "many," "most," "some," or "in a few cases."

Sometimes an argument makes a bold, absolute claim, but the evidence really only justifies a more tentative conclusion. We can point out in our assessment that the argument lacks the appropriate qualifying words like "possibly," "maybe," "probably," "almost certainly," or "in all likelihood."

See [Section 2.8: Finding the Limits on the Argument](#) for more ways to limit the scope or degree of certainty.

Phrases for assessing an argument's evidence

Praising evidence

- She convincingly supports this claim by _____.
- They give many examples of _____ to support the idea that _____.
- His evidence of _____ ranges from anecdotes to large-scale academic studies to expert testimonials.
- X refers to credible academic studies of _____ to bolster their argument that _____.
- X refers to a number of credible experts to establish that, in general, _____.

Critiquing evidence

- X asserts that _____ but does not offer any evidence.
- The argument builds on the premise that _____, but fails to support that premise.
- X offers scant evidence for the claim that _____.
- The argument gives an example to support the claim that _____, but gives no evidence that this example is typical.
- _____ is not enough to show that _____.
- The essay offers only _____ as evidence when it should also point to _____ and _____.
- X's claim that _____ is too broad given that they only give evidence related to _____.
- The evidence does not warrant such a definite conclusion about _____.
- X has been a bit hasty to declare that _____. So far, the scanty data on _____ only warrant cautious speculation.

Exercise 4.4.1

Choose an argument you have recently read for class, or select one from [Section 15.1: Suggested Short Readings](#). Make a list of the pieces of evidence the argument presents and decide whether each piece is a fact, statistic, testimony, or anecdote. Is a credible source given for each?

Answer available at the end of this section.

Attributions

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Answers

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4.5: Fallacies- Common Problems to Watch For

Media Alternative

Listen to an audio version of this page (21 min, 42 sec):

Why assumptions matter

One of the most powerful techniques for testing whether an argument is valid is to find out what assumptions it makes and check those assumptions. Noticing and questioning assumptions is a core slow thinking practice in college. Beyond that, questioning assumptions may be one of the most powerful mental habits a human can learn.

In his bestseller *The Four Agreements: A Practical Guide to Personal Freedom*, Don Miguel Ruiz advises, “Don’t make assumptions.” But we do make assumptions; every belief, every argument depends on them. Perhaps Ruiz’s advice is a shorthand way to ask us to learn to recognize our assumptions so we can decide when to set them aside.

Questioning assumptions is a habit we may find empowering, freeing, and useful in any area of life. Novelist Isaac Asimov put it another way: “Your assumptions are your windows on the world. Scrub them off every once in a while, or the light won’t come in.” Discovering a hidden assumption can be a revelation; it suggests the possibility that things might work another way. There may be other angles to consider.

Questioning assumptions can be a way to speak back to authority. Those in power often make assumptions based on their privilege, assumptions that help them stay in power. They may rationalize their decisions by justifying them with better-sounding reasons. The white defenders of slavery made a thousand such arguments. Abraham Lincoln responded, “Whenever I hear anyone arguing for slavery, I feel a strong impulse to see it tried on him personally.” Questioning the assumptions of such arguments can help expose their immorality and challenge the power structure.

Questioning the assumptions of the dominant culture can help anyone less privileged feel personally empowered. Bob Marley famously sang “Emancipate yourselves from mental slavery. // None but ourselves can free our minds.”

Questioning assumptions about other people makes it possible to set aside stereotypes and connect authentically. Michelle Obama, in her book *Becoming*, calls on us to “fear less, to make fewer wrong assumptions, to let go of the biases and stereotypes that unnecessarily divide us.”

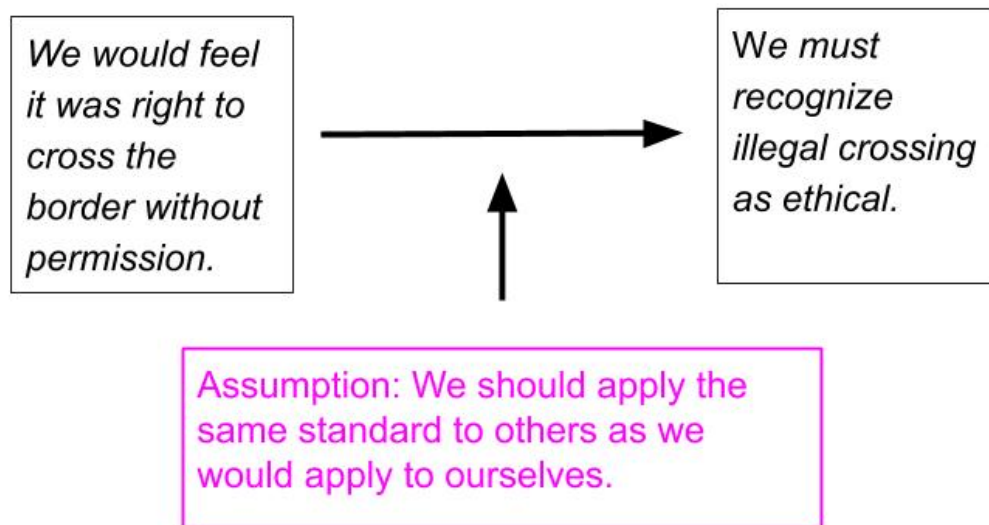
On a practical level, questioning assumptions can also help us problem-solve. There may be a way around a difficulty if we realize how our assumptions have limited our view. By first recognizing and then changing our assumptions, we can, to use a common phrase, “think outside the box.”



Image by [Arek Socha](#) from [Pixabay](#) under the [Pixabay License](#).

What assumptions does the argument make?

Most arguments don't mention their assumptions, so summaries don't typically mention them either. However, when we assess an argument or write a critical analysis, we need to know whether the argument has a strong foundation. The reason might seem to prove the claim, but that leap from one to the other depends on assumptions. The writer may not even be aware of these ideas, but they are still necessary to the argument. Philosopher Stephen E. Toulmin popularized the process of finding the assumptions that link the reason to the claim. He called these **warrants**, and he found it useful to write them into an argument map such as the one below (see [Chapter 2: Reading to Figure out the Argument](#) for more on argument mapping).



"Argument Map with Assumption" by Anna Mills is licensed [CC BY-NC 4.0](#). See the [accessible text description of the argument map with assumption](#).

In the map, the assumption goes underneath with the arrow pointing up because the assumption supports or props up the whole argument. Note that this assumption is similar to the Golden Rule, "Do unto others as you would have them do unto you."

Arguments depend on more than one assumption. The above example also depends on the assumption that "People currently need permission to cross the border legally." We know that under current policy, governments decide whether or not to allow people in. However, it is probably not useful to identify assumptions that are easily verified and not controversial. In fact, we do

not need to find every underlying assumption in order to assess an argument; we only need to know which are questionable.

So if we are reading an argument, how do we identify the assumptions it makes? In a few cases writers will point out their assumptions with phrases like the following:

- I will assume here _____.
- This rests on the assumption that _____.
- Of course, this depends on _____.
- As we know, _____.
- This argument rests upon the idea that _____.
- The underlying principle here is that _____.

More commonly, though, writers do not state assumptions, sometimes because they seem obvious and sometimes because drawing attention to the assumptions might draw attention to a weakness in the argument. We will need to identify these assumptions on our own.

The basic method is to ask ourselves what the reason needs to support the claim. What other idea is necessary for us to make the leap from reason to claim? What underlying idea does that leap depend on?

In the border example above, most people would probably agree that we should apply the same standards to ourselves as we do to others. The border argument also depends on the assumption that "People currently need permission to cross the border legally." Both of those assumptions are uncontroversial, so why do we need to talk about them? In fact, we do not need to find every possible underlying assumption in order to assess an argument. We need to focus on assumptions that might not be true or that might not be universally accepted.

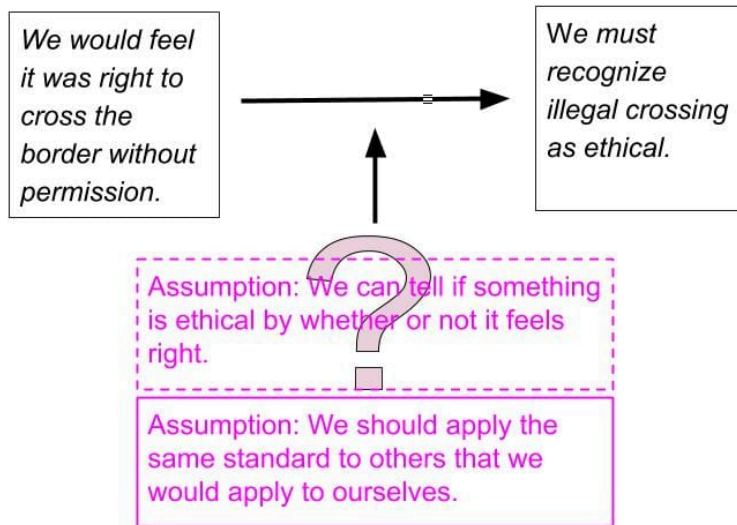
One way to uncover problematic assumptions is to brainstorm cases where the reason wouldn't necessarily lead to the claim. We can put the reason and the claim into the following question:

Just because [reason] does that necessarily mean that [claim]?

If we can think of a case in which the reason doesn't lead to the claim, then there must be a problematic assumption. We can try to find this assumption by filling in the "scenario" blank below with a case in which the reason was true but the claim was not. This technique is sometimes called a **scenario test**:

Just because [reason] that doesn't mean [claim] because it could be that...[scenario].

For example, in the case of the border argument, we could write, "Just because we would feel it was right to cross the border without permission doesn't necessarily mean that we must recognize illegal crossing as ethical because it could be that..." I am tempted to complete this with the idea that "our personal feelings are not always the best guide to ethics." Or I could complete it with a more specific case: "It might be that crossing without permission isn't really right even though some people might feel it is." This helps us to identify another assumption--that we can tell if something is ethical by whether or not it feels right.



"Questionable Assumption Argument Map" by Anna Mills is licensed [CC BY-NC 4.0](#).
See the [accessible text description of the questionable assumption map](#).



Like a house, an argument needs a solid foundation.
Photo by [Cindy Tang](#) on [Unsplash](#) under the [Unsplash License](#).

Are the assumptions valid?

Look for exceptions to the assumptions

If we want to test an assumption, we can look to cases unrelated to our argument that might prove it wrong. We can probably think of a person who sincerely believes they are doing right, while we are sure their action is unethical. A suicide bomber may believe they are doing God's will by killing people. We can use such a counterexample to help us argue that the assumption in question is not universally true and thus the reason does not necessarily imply the claim.

Look for evidence for the assumptions

In the rare case that an argument lists its assumptions and explains why they are justified, we can check whether we find these justifications convincing. More often, though, the author will not have stated the assumptions or provided evidence to support

them. Our critique is a place to call for evidence of any key assumption we have uncovered. We don't have to make a final pronouncement on whether the assumption is true or not; we may not have formed an opinion on that yet. We may be inclined to doubt it or to believe it, but either way, we should point out when the assumption needs support. (Philosopher Stephen Toulmin called support for an assumption "**backing**" so you may see that term used in other rhetoric textbooks).

For example, the argument below relies on the idea that chronic stress is bad for health:

Reason: According to Penn Medicine News, "exposure to weight bias and stigma . . . can lead to a physiological stress response such as increased inflammation and cortisol levels."

Claim: Fat-shaming may be one cause of the health problems associated with being fat.

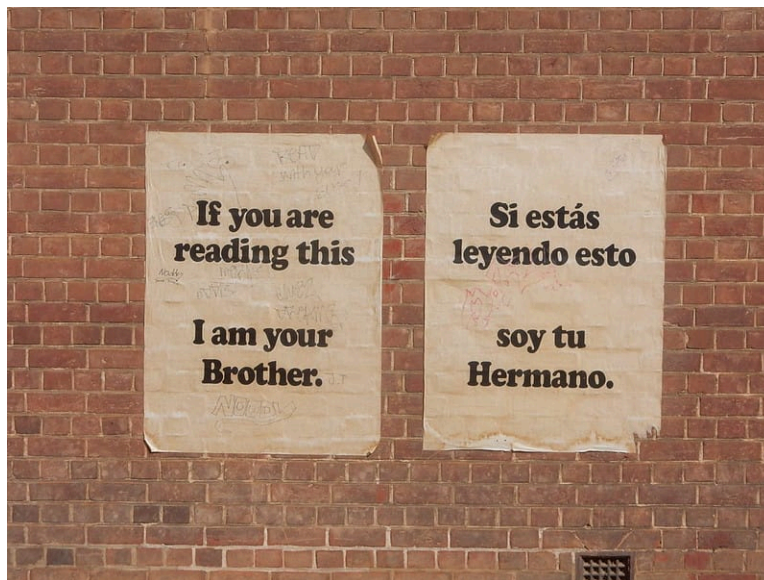
Assumption: Chronic stress leads to health problems.

We can check if this assumption is valid by consulting a range of reputable medical journals, and we will find many statements and studies that back it up. For example, the popular and well-regarded site MayoClinic.org includes an article with the title, "Chronic stress puts your health at risk" and lists effects from heart disease to memory impairment.

Common problems with assumptions

Assuming a logical connection where there isn't one

Sometimes an argument leaps from a reason to a claim that is not really related. This problem is known generally as a **non sequitur**, which is Latin for "It does not follow." The scenario test will turn up cases like this. Again, we ask ourselves *Just because [reason] does that necessarily mean that [claim]?*



"Non Sequitur" by [mikecogh](#) on Flickr is licensed under [CC BY-SA 2.0](#)

When we use the phrase "non sequitur" in conversation, we usually mean that a statement seems random or out of place. However, in argument non sequiturs often sound convincing and not random at all. On closer examination we see that logically speaking, the reason does not necessarily make the claim true. For example, let's take the assertion that "Overseas Filipino workers (O.F.W.s) are not citizens in the countries where they work, so they have no legal rights." Just because workers are not citizens does not mean that they have no legal rights. People can have legal rights without being citizens although the law may treat citizens and non-citizens differently in some cases.

One special case where a logical connection is missing is known as a red herring fallacy or a fallacy of distraction. We commit the red herring fallacy if we attempt to distract the audience from the main thread of an argument, taking things off in a different direction. The diversion is often subtle, with the detour starting on a topic closely related to the original—but gradually wandering

off into unrelated territory. The tactic is often, but not always, intentional: if the arguer is not comfortable arguing about a particular topic on the merits, they change the subject to an issue about which they feel more confident and pretend to have won the original argument.



"Red Herring" by Laurel Russwurm on [Flickr](#) is licensed under [CC0](#).

The red herring fallacy gets its name from the actual fish. When herring are smoked, they turn red and are quite pungent. Stinky things can be used to distract hunting dogs, who of course follow the trail of their quarry by scent; if you pass over that trail with a stinky fish and run off in a different direction, the hound may be distracted and follow the wrong trail.

An argument like the following is a good example of the red herring fallacy:

Our staff sanitize every classroom surface multiple times throughout the day. Therefore, our school is a leader in stopping the spread of Covid 19.

During the Covid 19 pandemic, many people and institutions have focused on what Atlantic writer Derek Thompson called "hygiene theater"--the tendency to showcase practices like sanitizing surfaces beyond their actual protective value. This continued even after scientists had known for some time that airborne transmission was much more common than transmission through surfaces. The focus on surface hygiene diverted attention away from mask-wearing and ventilation systems, which were more statistically effective in preventing transmission.

Assuming two things are comparable

False analogy

Many arguments rely on a similarity between two things, usually referred to as an analogy, to conclude that if something is true for one, it will be true for the other. But things that are similar will also have differences, and so for any such argument we need to ask whether there are any differences significant enough to change the outcome. Are the two things really similar enough to justify the conclusion? If not, we have what is often called a **false analogy** fallacy.

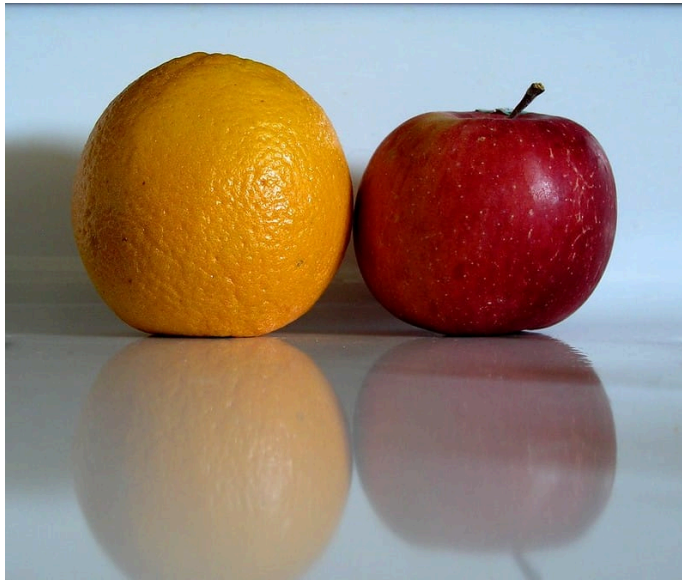
For example, consider the following argument:

People have a First Amendment right to express opinions by donating money to political candidates, so corporations should also have that right.

This is a summary of the decision the Supreme Court came to in the landmark 2010 decision *Citizens United vs. FEC*. It depends on an analogy between corporations and people, an idea called "corporate personhood" in legal terms. Chief Justice Roberts argued, essentially, that the First Amendment applies to groups of people, such as corporations, as well as to individuals. Now, is this a fallacy? In a dissenting opinion, Justice Stevens argued that the Constitution was intended to apply to "We, the People," not corporate entities. He listed the key differences that led him to conclude that:

In the context of election to public office, the distinction between corporate and human speakers is significant. Although they make enormous contributions to our society, corporations are not actually members of it. They cannot vote or run for office. Because they may be managed and controlled by nonresidents, their interests may conflict in fundamental respects with the interests of eligible voters. The financial resources, legal structure, and instrumental orientation of corporations raise legitimate concerns about their role in the electoral process. Our lawmakers have a compelling constitutional basis, if not also a democratic duty, to take measures designed to guard against the potentially deleterious effects of corporate spending in local and national races.

As we can see, Justice Stevens thought that this was a case of false analogy, but Chief Justice Roberts disagreed. Introducing the fallacy label here does not resolve the debate, but it may help to clarify where the disagreement lies.



Are apples and oranges too different to compare? "Like apples and oranges" by Sarah Braun on [Flickr](#) is licensed under CC BY NC SA 2.0.

Slippery slope

One type of invalid comparison comes in arguments that make a dramatic prediction that if one thing happens, other more dramatic things will inevitably follow. It depends on the idea that the first event is comparable to the other, more dramatic events. A **slippery slope** argument claims a disastrous cascade effect will take place if we take certain action. It presents a chain of events leading to disaster as if it is unstoppable or highly probable. But how slippery is the slope really? How likely is the disaster? Are there factors that could stop the chain reaction?

For example, take the following argument:

If we allow people to self-identify their gender regardless of their biology, they will expect to be able to self-identify their race and then their age and species. Next thing we know, the law will demand we pretend a person is a gorilla!

There is a certain appealing momentum to these arguments: we imagine a boulder rolling down a hill. But will one thing really lead to another? Just because we can imagine that one thing might lead to another does not mean that it inevitably will. Many transgender people already legally claim a gender identity different from the one they were assigned at birth. However, very few people believe themselves to be a different age than their chronological age or a species other than human. There is no movement to push for legal recognition of self-identified age or species.



If it falls, this boulder will not roll far; the slope is not slippery. Photo by [Prashant Kumar](#) on [Pixahive](#), licensed under [CC0](#).

Fallacious slippery slope arguments have long been deployed to resist social change. Those opposed to the abolition of slavery warned of economic collapse and social chaos. Those who opposed women's suffrage asserted that it would lead to the dissolution of the family, rampant sexual promiscuity, and social anarchy. Of course, none of these dire predictions came true; the slopes weren't slippery.

We can critique a slippery slope argument with phrases like the following:

- The argument claims that _____ will inevitably lead to _____, but this is far from certain.
- They assume that _____ will set off a chain reaction leading to _____; however this is unlikely because _____.

(We can also think of the slippery slope arguments as committing the fallacy of false analogy. We saw above that one argument against letting people identify their own gender depended on a comparison between gender identity and other forms of identity such as species and age, but most would argue that key differences between these categories would lead to different legal treatment. The differences would stop the slide down the slope. Faulty arguments can often legitimately be classed under different fallacy labels.)

Assuming that one thing causes another

Arguments often claim casually that an earlier event caused a later event. To be sound, such arguments need quite a bit of support. They need to show that there is a likely way in which the first event *could* cause the second. They need to ask if something else have caused the second event. Could a third factor have caused both events? Maybe the first event contributed to the second, but other factors did as well. Or maybe there is no link between the two events at all.

Assuming that a first event caused a second without further justification is a fallacy variously referred to as false cause, doubtful cause, *post hoc ergo propter hoc*, *post hoc*, *post hoc* reasoning, or with the catchphrase "correlation is not causation." Once we look for it, we see it everywhere, including on the news and in reputable academic settings.

One example lies in the way we evaluate the performance of presidents of the United States. Everything that happens during or immediately after their administrations tends to be pinned on them. But presidents aren't all-powerful; they don't cause everything that happens during their presidencies. Similar claims on behalf of state governors are even more absurd. At the 2016 Republican National Convention, Governors Scott Walker and Mike Pence—of Wisconsin and Indiana, respectively—both pointed to record-high employment in their states as vindication of their conservative policies. But some other states were also experiencing record-high employment at the time: California, Minnesota, New Hampshire, New York, Washington. Yes, they were all controlled by Democrats. Maybe there's a separate cause for those strong jobs numbers in differently governed states? Possibly it has something to do with the improving economy and health of the job market in the country as a whole.

Proving that one thing caused another can be tricky. We talk more about various strategies for showing causation in [Section 7.5: Causal Arguments](#).

Phrases for critiquing assumptions

Once we have identified an assumption that we want to question, we can introduce the assumption and explain its weakness with it with phrases like the following:

- _____relies on the idea that _____; however, _____.
- The argument assumes that _____ without providing evidence.
- _____takes for granted that _____, but we may wonder whether this is a justified assumption because_____.
- _____depends on the assumption that_____. Is this always the case? Some might say that _____.
- _____ depends on a belief in _____, which may not be shared by all readers because _____.
- The underlying idea here is that _____; however we must ask ourselves whether _____.
- The implicit assumption is that _____ but some may question whether, in fact, _____.

Attributions

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4.5.1: Classification of Fallacies - All the Ways we Say Things Wrong

Again, the whole point of discussing fallacies is so that we are familiar with the common ways people go wrong with their reasoning so that we can (1) notice when others do it and (2) prevent ourselves from committing fallacies. There are general ways that we can think about fallacies, and approaching arguments with these things in mind will help you recognize fallacious reasoning even if you can't perfectly articulate where, why, and how something is going wrong. The three broad categories we'll use are:

1. Fallacies of evidence: these happen where the evidence presented doesn't relate to the argument or what is being presented as proper reasoning is unrelated to the topic, including misclassifying concepts or making overly broad or overly limited claims
2. Fallacies of weak induction: often referred to as "false causes" (latin: *non causa pro causa*), they occur when the evidence and claims don't actually provide enough strength to lead to the conclusions
3. Fallacies of ambiguity and grammatical analogy: these occur when someone makes use of something uncertain to make a certain claim without illustrating the appropriate connection or by using an inappropriate connection to go from the premises to the conclusion

Fallacies of evidence happen when the evidence provided just doesn't have much to do with the conclusion that the argument is trying to arrive at. In general, someone says something or gives evidence that is meant to deceive you into accepting the conclusion without actually giving you good *philosophical* reasons to accept it. You might want to accept it anyway for concerns having nothing to do with the argument. For example, an "Appeal to Force" is a common fallacy of this kind:

If you don't agree with me that potatoes are the most delicious food, then I'll smash your face in.

Smashing your face in has nothing to do with the deliciousness of potatoes, but you might be inclined to accept the argument nonetheless in order to spare your face from getting smashed in. However, the line of reasoning that led you there was inappropriate: you accepted the conclusion for a reason that has nothing to do with the reasons it should be accepted.

To avoid and spot these fallacies, you basically just have to ask yourself, "Do the claims I am presenting give someone an appropriate, specific, and direct reason to accept the truth of my conclusion?" If not then, then you might be committing a fallacy of evidence. If someone else does this, then you know that shouldn't accept their conclusion for the reasons they have presented. We will be covering these fallacies of evidence in more detail (though there are more fallacies than just what we cover here and these fallacies can also be interpreted to fall under other categories of fallacies – but bad reasoning is bad reasoning and it doesn't matter what category we put these in, as long as you recognize fallacious reasoning):

- Non Sequitur
- Red Herring
- Straw Man
- *Ad hominem*
- Naturalistic Fallacy
- Appeal to Authority
- Appeal to Force
- Appeal to Fear
- Appeal to Pity
- Appeal to Tradition
- Appeal to Novelty
- Appeal to Ignorance
- Appeal to Popularity

Fallacies of weak induction occur when the argument being presented just doesn't give strong enough reasons to accept the conclusion. Generally, the connection between the claims and the conclusion has not been shown to be strong enough to be convincing, but there are also more technical ways they can go wrong. There are also arguments that appear to say something, but don't, in which case, your acceptance of the conclusion has nothing to do with the arguments themselves.

Many of these can be termed “false causes” because the “causes” don’t obviously lead to the “effects.” A *Post hoc ergo propter hoc* (in English, “after this, therefore because of this”) fallacy incorrectly posits causality on an event that occurred prior to another event, when the two are actually merely correlated. This sounds technical and complicated, but is actually rather simple. Here are two examples:

1. Shortly after broad social acceptance of homosexuality in Ancient Rome, the Roman Empire collapsed. Therefore, the acceptance of homosexuality caused the downfall of the Roman Empire.
2. Just Bieber’s rise to stardom occurred after you were born, therefore your being born is the cause of Just Bieber’s stardom. Thank you for that.

Neither of these arguments are necessarily incorrect, but the line of reasoning employed and the evidence presented do not provide enough strength for us to accept the conclusion based on the premises. It’s possible that these are good arguments, but just because something happens after something else doesn’t mean it has caused it. A lot more evidence would need to be presented in order to establish (1) and (2) might be true if the person in question were one of Justin Bieber’s parents.

A lot of these fallacies can get quite technical and require a keen eye for detail, but the general way to spot these is the same: Are the connections between the premises and the conclusions illustrated in a clear and strong enough fashion to be convincing? We will be covering these fallacies of weak induction in more detail (though there are more fallacies than just what we cover here and these fallacies can also be interpreted to fall under other categories of fallacies – but bad reasoning is bad reasoning and it doesn’t matter what category we put these in, as long as you recognize fallacious reasoning):

- *Post hoc ergo propter hoc*
- Fallacy of Composition
- Fallacy of Division
- Hasty Generalization
- Begging the Question
- Circular Argument
- Self-Sealing Arguments

Fallacies of ambiguity and grammatical analogy occur when one attempts to prove a conclusion by using terms, concepts, or logical moves that are unclear and thus unjustifiably prove their conclusion because they’re not obviously wrong. Again, this may sound complicated (and some of these fallacies are quite technical), but the idea is rather simple: a lack of clarity is abused to draw you to the conclusion without noticing that the path there was full of holes that you just didn’t see. Sure, the path might actually be good in the end, but you haven’t been given enough clarity to accept it.

We will be covering these fallacies of ambiguity and grammatical analogy in more detail (though there are more fallacies than just what we cover here and these fallacies can also be interpreted to fall under other categories of fallacies – but bad reasoning is bad reasoning and it doesn’t matter what category we put these in, as long as you recognize fallacious reasoning):

- Loaded Question
- Equivocation
- Amphiboly
- Undistributed Middle
- Weak Analogy
- Vacuity
- False Dilemma

4.5.2: Fallacies of Evidence

Non Sequitur Fallacy (Latin for “does not follow”)

A logical fallacy that is most often absurd, where the premises have no logical connection with or relevance to the conclusion.

Example: The police have not been able to crack this homicide cold case, so they've called a psychic in to help out. They have tried all the traditional police investigation methods and the case still isn't solved. Therefore, the psychic (the non-traditional method) is needed.

The general idea is that some evidence is being presented without its connection with the intended conclusion being illustrated in any way.

Red Herring (Latin: *Ignoratio elenchi*)

This fallacy involves the raising of an irrelevant issue in the middle of an argument, derailing the original discussion, and causing the argument to contain two totally different and unrelated issues. A red herring has happened when you begin your argument about one thing and end up arguing about something else entirely different. This fallacy renders any premises used logically unrelated to the conclusion. A red herring is a distraction tactic and is often used to avoid addressing criticism or attack by an opponent. This device is most commonly seen in political debates.

Example: The 'Occupy Wall Street' protesters complain that corporations and their money control Washington. But how can we take them seriously when their camps are messy, disorganized, with homeless people and drug addicts now living with them, and they are making life hell for the shop owners in their area?

Straw Man Fallacy

Like the red herring, a straw man tends to happen when one person is criticizing or attacking another's position or argument. It occurs when a person misrepresents or purposely distorts the position or argument of their opponent in order to weaken it, thus defeating it more easily. The name vividly depicts the action: imagine two fighters in a ring, one of them builds a man made of straw (like a scarecrow), beats it up horribly, and then declares victory. While doing this, his or her real opponent stands in the ring, completely untouched. The straw man is considered to be one of the commonest fallacies; in particular we see it in widely used in political, religious, and ethical debates.

Example: The Leader of the Opposition is against the purchase of new submarines and helicopters. Clearly he is okay with our country being defenseless and open to invasion by our enemies. He also obviously hates our country. So, be ready to learn a new language and give up all our freedoms!

Abusing The Man (Ad hominem)

Any attempt to disprove a proposition or argument by launching a personal attack on the author of it. A person's character does not necessarily predict the truth or falsity of a proposition or argument. There are many flavors of this fallacy and they all attempt to win an argument fallaciously:

Ad hominem denier – rejects the claim the person is making

Example: Mark said that Jill is the nicest person ever, but you should ignore everything Mark says.

Ad hominem silencer – rejects one's ability to talk about the claim

Example: All of Marx's economic doctrines are hogwash. But this was to be expected given he studied only philosophy in university, not business, and he never even held down a regular job.

Ad hominem dismitter – rejects the reliability of the speaker

Example: John said he saw me take the tacos, but he always lies about eating people's food, so you shouldn't trust him.

Tu quoque ad hominem ("You too", or appeal to hypocrisy)

Example: Why should I listen to you when you tell me to stop drinking? You're the biggest drunk I know!

Of course, if the person being attacked in an *ad hominem* really is guilty of the claim *and* it is relevant to the argument, then attacking them in this fashion is not fallacious.

Naturalistic Fallacy

(Latin: *argumentum ad Naturam*) A fallacy that occurs when a person bases their argument of position on the notion that what is natural is better or what 'ought to be'. In other words, the foundation for the argument or position is a value judgment; the fallacy happens when the argument shifts from a statement of fact to one of value. The word 'natural' is loaded with positive evaluation, like the word 'normal', so implied in the use of it is praise. One commonly sees this fallacy in moral arguments.

Example: It is only natural to feel angry sometimes; therefore there is nothing wrong with feeling angry.

Appeal to Authority

(Latin: *argumentum ad verecundiam*) An attempt to prove a conclusion by an improper appealing to an authority, and this appeal is considered improper when the authority is irrelevant and/or unrecognized.

Example: My mom says if I eat watermelon seeds, a plant will grow in my belly and I'll turn green. Because my mom said it, it is true.

It should be noted here that not all appeals to authority are faulty. When you are sick, you do visit your doctor and take their advice, and when you get into legal trouble you follow what a lawyer tells you. So, an appeal to authority can be relevant and proper when the authority you appeal to is (1) recognized as having authoritative expertise in that area, and (2) if we ourselves lack the information, the experience, or cannot firsthand acquire the information required ourselves for the argument. To appeal to statements made by Buzz Aldrin when speaking about the moon's surface is a proper application of authority. In general, you should ask

- Is the cited authority in fact an authority in the appropriate area?
- Is this the kind of question that can now be settled by expert consensus?
- Has the authority been cited correctly?
- Can the cited authority be trusted to tell the truth?
- Why is an appeal to authority being made at all?

Appeal to Force

(Latin: *argumentum ad baculum*) Any attempt to make someone accept a proposition or argument by using some type of force or threat, possibly including the threat of violence. After all, threats do not establish truth whatsoever.

Example: Company policy concerning customer feedback is "it's either perfect (100%) or we failed (99% or less)". Anyone who doesn't support this will be fired.

Appeal to Fear

Any attempt to make someone accept a proposition or argument by using fear related to the concept as a motivation.

Example: Do you want Al-Qaeda to take over the world? No? Then you should vote to increase military spending.

Appeal to Pity

(Latin: *argumentum ad misericordiam*) Any attempt to make someone accept a proposition or argument by arousing their emotions. A strong emotional appeal is meant to subvert someone's rational thinking. Remember: Pity alone does not establish truth.

Example: The defendant should not be found guilty of this crime. Her life has been filled with endless abuse, a lack of love and respect, and so many hardships.

Appeal to Tradition

(Latin: *argumentum ad antiquitatem*) This fallacy happens when someone cites the historical preferences and practices of a culture or even a particular person, as evidence for a proposition or argument being correct. Traditions are often passed down from generation to generation, with the explanation for continuity being "this is the way it has been done before", which is of course not a valid reason. The age of something does not entail its truth or falsity.

Example: We have turkey for Thanksgiving dinner and duck for Christmas dinner every year, because that is how my parents and grandparents did it, so it's the right thing to do.

Appeal to Novelty

(Latin: *argumentum ad novitatem*) This fallacy is the opposite of appeal to tradition, in that it is the attempt to claim that the newness or modernity of something is evidence of its truth and superiority. The novelty of the idea or proposition does not entail its truth or falsity.

Example: String Theory is a new and rising research area in particle physics, and therefore it must be true.

Appeal to Ignorance

(Latin: *argumentum ad Ignorantiam*) The attempt to argue for or against a proposition or position because there is a lack of evidence against or for it: I argue X because there is no evidence showing not-X.

Example: There is intelligent life on Neptune, for sure. Science has not found any evidence that there isn't life there.

Appeal to Popularity

(Latin: *argumentum ad numeram*) The attempt to use the popularity of a position or premise as evidence for its truthfulness. This is a fallacy because the popularity of something is irrelevant to its being true or false. It is one that sometimes is difficult to spot or prevent doing because common sense often dictates that if something is popular it must be true and/or valid.

Example: Eating quinoa daily is a healthy thing everyone is doing, so it must be the right choice.

Again, sometimes these can be non-fallacious. You have to ask the following questions:

- Is this opinion actually widely held?
- Is this the kind of area where popular opinion is likely to be right?
- Why is an appeal to popular opinion being made?

4.5.3: Fallacies of Weak Induction

Post hoc ergo propter hoc

(Latin for “After this, therefore because of this”) This fallacy happens when one argues that because X happened immediately after Y, that Y was the cause of X. Or, when concerning event types: event type X happened immediately after event type Y, therefore event type Y caused event type X. In a sense, it is jumping to a conclusion based upon coincidence, rather than on sufficient testing, repeated occurrence, or evidence.

Example: The sun always rises a few minutes after the rooster crows. So, the rooster crowing causes the sun to rise.

Example: Once the government passed the new gun laws, gun violence dropped by 10%, therefore the new gun laws are working and caused the occurrence of gun violence to drop.

Fallacy of Composition

(Also known as exception fallacy) The fallacy of assuming that when a property applies to all members of a class, it must also apply to the class as a whole.

Example: Every player in the NHL is wealthy; therefore, the NHL must be a wealthy organization.

However, this type of reasoning is not always fallacious: Every scene in that movie is hilarious, so the movie is hilarious.

Fallacy of Division

(Also known as false division, or faulty division)

The fallacy of assuming that when a property applies to the class as a whole, it must also apply to every member of that class as well.

Example: The US Republican Party platform states that abortion is wrong and should be illegal. Therefore, every Republican must believe that abortion is wrong and should be illegal.

However, this type of reasoning is not always fallacious: That sculpture of Pee Wee Herman is made of metal, so his hand is made of metal.

Hasty Generalization

(Also known as argument from small numbers, unrepresentative sample) This fallacy occurs most often in the realm of statistics. It happens when a conclusion or generalization is drawn about a population and it is based on a sample that is too small to properly represent it. The problem with a sample that is too small is that the variability in a population is not captured, so the conclusion is inaccurate.

Example: My Grandfather drank a bottle of whiskey and smoked three cigars a day, and he lived to be 95 years old. Therefore, daily smoking and drinking cannot be that bad for you.

Begging the Question

(Latin: *Petitio Principii*) The fallacy of attempting to prove something by assuming the very thing you are trying to prove. Essentially, in order for one of the premises to be true, the conclusion must already be true. This is very similar to a circular argument (see below), but it is subtly different.

Example: The Bible is the word of God, God never lies, and the Bible says God exists, so God must exist. (Note: In order for the Bible to be the word of God, you must assume God exists – but isn't that your conclusion?)

Example #2: It's always wrong to murder human beings. Capital punishment involves murdering human beings. Therefore, capital punishment is wrong.

Note that this is NOT “raising the question” as “begging the question” is often used:

“He always carries around a knife, that begs the question, what he is scared of?”

Circular argument

The fallacy of proving something that you've already assumed. Basically, your conclusion has already appeared as an assumption.

Example: All of the statements in Smith's book *Crab People Walk Among Us* are true. Why, he even says in the preface that his book only contains true statements and firsthand stories.

Self-sealers

A self-sealing argument is one that cannot possibly be wrong for one reason or another. Definitional arguments or claims and conspiracy theories are perfect examples.

Example (“true by definition”): The following is a clear example of a self-sealing statement: Two weeks from today at 4:37 PM you are going to be doing *exactly* what you will be doing.

Example #2 (“universal discounting”): Aliens exist and the only reason we don't think they exist is because they're making us believe that.

So how do you deal with self-sealers? The best way is to just ignore them or not start an argument with someone who uses them in the first place. Also called “going upstairs” because instead of staying downstairs and speaking with a highly irrational person, you'd rather just go upstairs, put your headphones, and listen to some Nickelback. This would appear to be the only situation where listening to Nickelback is preferable to the alternative. (Am I committing fallacy here in this line of reasoning?)

4.5.4: Fallacies of Ambiguity and Grammatical Analogy

Loaded Question Fallacy

(Also known as complex question, fallacy of presupposition, trick question) The fallacy of asking a question that has a presupposition built in, which implies something (often questionable) but protects the person asking the question from accusations of false claims or even slander.

Example: Have you stopped beating your wife yet?

This question is a real 'catch 22' since to answer 'yes' implies that you used to beat your wife but have now stopped, and to answer 'no' means you are still beating her. The question rests on the assumption that you beat your wife, and so either answer to it seems to endorse that idea.

Equivocation

(Also known as doublespeak) A fallacy that occurs when one uses an ambiguous term or phrase in more than one sense, thus rendering the argument misleading. The ambiguity in this fallacy is lexical and not grammatical, meaning the term or phrase that is ambiguous has two distinct meanings. In other words, it happens when one term is assumed to mean the same thing in two different contexts, but actually means two different things. One can often see equivocation in jokes.

Example: Man is the only rational animal, and no woman is a man, so women are not rational.

Example: If you don't pay your exorcist you can get repossessed.

Example: A feather is light; whatever is light cannot be dark; therefore, a feather cannot be dark.

Amphiboly

A fallacy of ambiguity, where the ambiguity in question arises directly from the poor grammatical structure in a sentence. The fallacy occurs when a bad argument relies on the grammatical ambiguity to sound strong and logical.

Example: I'm going to return this car to the dealer I bought this car from. Their ad said "Used 1995 Ford Taurus with air conditioning, cruise, leather, new exhaust and chrome rims." But the chrome rims aren't new at all.

There are other kinds of amphiboly fallacies, like those of ambiguous pronoun reference: "I took some pictures of the dogs at the park playing, but they were not good." Does 'they' mean the dogs or the pictures "were not good"? And there is amphiboly when modifiers are misplaced, such as in a famous Groucho Marx joke: "One morning I shot an elephant in my pajamas. How he got into my pajamas I'll never know."

Fallacy of the Undistributed Middle

(Also known as undistributed middle term) A formal fallacy that occurs in a categorical syllogism (we'll look at these next week), when the middle term is undistributed is not distributed at least in one premise. According to the rules of categorical syllogism, the middle term must be distributed at least once for it to be valid.

Example of the form: All X's are Y's; All Z's are Y's; Therefore, All X's are Z's.

Example in words: All ghosts are spooky; all zombies are spooky; therefore all ghosts are zombies.

Weak Analogy

(Also known as faulty analogy, questionable analogy) While arguments from analogy will be covered in more detail later in this work, it is worth covering the fallacy of weak analogies right now. When someone uses an analogy to prove or disprove an argument or position by using an analogy that is too dissimilar to be effective. Two important things to remember about analogies: No analogy is perfect, and even the most dissimilar objects can share some commonality or similarity. Analogies are neither true nor false, but come in degrees from identical or similar to extremely dissimilar or different.

Example: Not believing in the monster under the bed because you have yet to see it is like not believing the Titanic sank because no one saw it hit the bottom.

Vacuity

Vacuous arguments are arguments that say nothing. Here is generally the correct format of argumentation:

- *A* asserts that *p* is true. - *B* raises objections *x*, *y*, and *z* against it. - *A* then offers reasons to overcome these objections.

Vacuous arguments don't exactly follow this format. Vacuous arguments don't really make an argument – they don't add anything to our knowledge. They don't make a series of statements and point them at something new. For this reason, you can't exactly argue with them – you can point out the flaw in reasoning, but there isn't really an argument to refute.

Example: John, "Coconuts are the best food ever." Jack, "I once had a cat named Coconut."

False Dilemma

(Also known as false dichotomy, black-and-white fallacy) A fallacy that happens when only two choices are offered in an argument or proposition, when in fact a greater number of possible choices exist between the two extremes. False dilemmas typically contain 'either, or' in their structure. They often try to force the person into adopting one of the positions by making one option unacceptable.

Example: Either you help us kill the zombies, or you love them.

4.5.5: The Detection of Fallacies in Ordinary Language

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17 The Detection of Fallacies in Ordinary Language

Fallacies occur constantly, and there is no better place to see them in a political debate. Observe 5 minutes of any political debate between 2 or more candidates and do the following:

1) When a fallacy is said, pause the video, mark down the fallacy by noting what type of fallacy it is. 2) Identify the conclusion that the person was trying to reach and the premises being used to reach that conclusion. 3) Why do you think the fallacy was committed? Was it on accident or on purpose? 4) Is there a way of fixing the argument to avoid fallacies? 5) Did committing the fallacy hurt the candidate's overall strength in the debate? Why or why not?

You should have at least 20 fallacies after 5 minutes if you were paying close attention. Yes, that's how common fallacies are even for the best orators.

Here is an excellent visual example of recognizing fallacies in real life. It is too large and complicated to be printed here, but it is a categorization of fallacies in a paper written against Same Sex Marriage by a Catholic Bishop. It is a very detailed and careful analysis and is a good example of just how many fallacies are committed in public debates and how committing the argument itself may sound appealing to many people before recognizing the extent to which the argument is fallacious:

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4.5.6: Searching Your Essays for Fallacies

18 Searching Your Essays for Fallacies³²

When it comes to writing your own arguments and finding fallacies, it can be hard to spot them yourself. It is often very helpful to have someone else read through it and spot fallacies for you (assuming they have training in logic). However, if you are attempting to find and resolve any fallacies for yourself in your own essays, you should do the following:

1) Whenever you are making an argument, clearly identify the conclusion you are trying to reach and the premises you are using to arrive at the conclusion. 2) Check the premises to see if they are actually relevant in the argument you are making and if they all connect to each other. 3) Check to see that the premises actually lead to the conclusion in the right ways to support it.

Going through your essay slowly and carefully in this fashion can help you find and fix any fallacies before others even see them. Mostly, you just need to be sure that what you're saying actually does properly lead to the conclusions you are attempting to convince others to accept. Usually you'll go wrong by bringing in claims that just don't matter for what you're saying. Here's the most important thing to remember about relevance of the claims when it comes to writing argumentative essays: If you say something that doesn't relate to your argument, I *really* don't care. Why, you ask? Because it would be irrelevant. Like if I say, "My friend Steve Weimer is the best fantasy baseball player I know because he always wins, he follows every game, he's won major tournaments, and he's six feet tall." Being six feet tall has nothing to do with being good at fantasy baseball – at least I truly hope not, or I'm doomed to failure.

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5: Making Your Recommendation in Response to an Argument

Audio Version

Academia is founded on the idea of an ongoing conversation in which we can learn from each other and from the process of discussion. Once we've assessed the quality of another person's argument, there is an opportunity to take our reflection a step further. What can we learn from the successes and failures of the argument? What recommendation might come out of the assessment? Can we offer a way to fix the argument in question or a way to take it a step further? Can we suggest an entirely different approach to the issue? Just as there are many ways to respond productively to an idea in conversation, there are many ways to respond in writing that contribute to an ongoing discussion and search for truth.

Some college writing assignments ask us explicitly to add our own perspective once we have assessed the strength of an argument. We may be asked to write one or more paragraphs about our own recommendations after we have assessed an argument. Even if we are not specifically asked for recommendations, we can consider putting them into our conclusion. A suggestion of a way forward can make the end of an essay more compelling, engaging, and meaningful. In a conclusion, we can enjoy the freedom to consider possibilities without making a final decision about whether to pursue them. We are leaving readers with ideas they can explore further on their own. Here are a few approaches to making a recommendation even if we don't claim to have all the answers about the issue.

Take the Argument a Step Further

We might support the argument and ask readers to take it a step further. Here are a few ways to do that:

- Add to the sense of urgency about the argument with our own explanation for why it matters.
- Recommend ways to draw attention to the issue.
- Suggest that the argument has implications even beyond what the writer discusses.
- Remove limitations on the argument to make a broader claim.
- Argue that the argument's claim points us toward a particular course of action.

Call for Clarification

A response essay could call for greater clarity. If we choose to focus on what's not clear, we'll want to be able to explain how that ambiguity weakens the argument. Is the vagueness covering a fatal flaw in the argument, a difficulty or a contradiction that won't be simple to explain away? Or is it easy to fix if the author clarifies one small point? Perhaps we can recommend a way we would want to see the argument revised. Which clarified version of the argument would we support?

Call for More Support or Inquiry

The process of analyzing the argument will often lead us to see what it is that we do not know. It may expose areas of uncertainty or contradiction that are intriguing. If we have called into question a reason or an assumption, we may want to recommend further research or support. Perhaps we are not ready to accept something without further evidence. In that case, we might describe the kind of study or investigative journalism that could uncover a reason.

Call for Limits on the Argument

If our assessment has pointed out exceptions to the argument, then readers will be wondering whether these exceptions invalidate the argument or whether they can be dealt with by limiting its scope. We may want to suggest that the argument has something valuable but that it needs to limit what it is claiming more than it has done.

Find Middle Ground on a Controversial Point

If the argument we analyzed is controversial, we can recommend some middle ground with the potential to bring two opposing sides together. Perhaps we do not fully agree with the argument but we don't want to alienate audiences who are sympathetic to it. We might focus on how we can build on some aspects of it while changing others. **Rogerian argument** is an approach that emphasizes empathy for both sides on a polarized issue. Rogerian arguments try to find common ground between two sides to move the discussion forward.

Point toward an Alternate Claim or Reason

If we just analyzed an argument we found to be weak, we may already have an opposing argument or an alternate argument in mind. If readers are convinced that the first argument is without merit, they will be looking for a replacement. Our critique puts us in a good position to present an alternate vision. We might recommend a new reason to add to the argument to strengthen it. For example, we noted earlier that in the argument below, the reason was the same as the claim, a fallacy called circular reasoning.

Anyone born in the United States has a right to citizenship because citizenship here depends on birth, not ethnicity or family history of immigration.

We could suggest a better reason for the same claim:

Anyone born in the United States has a right to citizenship because the Fourteenth Amendment to the Constitution guarantees birthright citizenship.

Suggest a Different Way to Frame the Issue

Even if we are not ready with an alternate argument we want to promote, we may at least have some recommendations for shaping the conversation. Perhaps we can provide some insight into the best way to talk about the problem, even if we do not have the answer to it. We can make a comparison with another argument or issue. Or we can suggest that the argument address some deeper question before tackling a specific case. Alternately, we might suggest that discussing particular cases will bring the issue to life and help us clarify what is at stake.

Thumbnail: <https://www.pexels.com/photo/man-in-black-jacket-1708987/>

6: THE RESEARCH PROCESS

- 6.1: Approaching a Research Paper Assignment
- 6.2: Where to Find Authoritative Sources
- 6.3: Getting Familiar with Academic Journal Articles
- 6.4: Searching for Journal Articles
- 6.5: Strategies for Each Phase of the Research Process

6.1: Approaching a Research Paper Assignment

Media Alternative

Listen to an audio version of this page (1 min, 51 sec):

Before getting started on a research paper, spending some time with the prompt will help keep us from becoming overwhelmed. A research essay **prompt** is the instructor's description of the assignment. It will answer many of the questions we may have about the requirements, such as the following:

1. How many sources will we need?
2. What types of sources (see [Section 6.5: Types of Sources](#))?
3. Do the sources need to be found somewhere specific, like the college library?
4. How long does the research essay need to be?
5. Is there a specific structure we are supposed to follow?



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The steps below will help us analyze the essay prompt to get a clear picture of what the finished paper should include.

- First, circle or highlight all of the most important verbs in the prompt. Verbs are action words that often communicate the most important tasks in the assignment, like *analyze*, *evaluate*, *describe*, and so on.
- Then, create a chart that lists each verb in its own row on the left and the rest of the sentence it occurs in on the right. This will contain the most important components of the assignment, so you can use it later to review your draft.
- Is one of these writing tasks more the focus of the essay than the others? For example, an assignment might ask you to summarize a problem but spend more of the essay describing a proposed solution. In that case, you could put a star next to the task of describing the solution.
- Underline or highlight any words or requirements you don't understand, and ask your professor to clarify.
- Summarize the research essay prompt aloud by telling a friend or classmate what your assignment is about and what the basic requirements are.

[Chapter 6](#) will describe what authoritative sources are, where to find them, and how to choose them. However, you can find your instructor's specific approach in the assignment description, so keep their instructions in mind as you read other advice on the research process.

Attributions

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6.2: Where to Find Authoritative Sources

Media Alternative

Listen to an audio version of this page (8 min, 55 sec):

You probably know by now that if you cite Wikipedia as an authoritative source, the wrath of your professor shall be visited upon you. Why is it that even the most informative Wikipedia articles are still often considered illegitimate? And what are good sources to use? The table below summarizes types of secondary sources in four tiers. All sources have their legitimate uses, but the top-tier ones are preferable for citation.



Just as different fruits have different internal structures, different kinds of sources have different characteristics and uses.

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Types of Sources

Tier	Type	Content	Uses	How to find them
1	Peer-reviewed academic publications	Rigorous research and analysis	Provide strong evidence for claims and references to other high-quality sources	Google Scholar, library catalogs, and academic article databases
2	Reports, articles, and books from credible non-academic sources	Well researched and even-handed descriptions of an event or state of the world	Initial research on events or trends not yet analyzed in the academic literature; may reference important Tier 1 sources	Websites of relevant agencies, Google searches using (site: *.gov or site: *.org), academic article databases
3	Short pieces from newspapers or credible websites	Simple reporting of events, research findings, or policy changes	Often point to useful Tier 2 or Tier 1 sources, may provide a factoid or two not found anywhere else	Strategic Google searches or article databases including newspapers and magazines
4	Agenda-driven or uncertain pieces	Mostly opinion, varying in thoughtfulness and credibility	May represent a particular position within a debate; more often provide keywords and clues about higher quality sources	Non-specific Google searches

Tier 1: Peer-reviewed academic publications

These are sources from the mainstream academic literature: books and scholarly articles. Academic books generally fall into three categories: (1) textbooks written with students in mind, (2) monographs, long documents which give an extended report on a particular research project, and (3) edited volumes in which each chapter is authored by different people. Scholarly articles appear in academic journals, which are published multiple times a year in order to share the latest research findings with scholars in the field. They're usually sponsored by some academic society. To get published, these articles and books had to earn favorable anonymous evaluations by qualified scholars. Who are the experts writing, reviewing, and editing these scholarly publications? Your professors. I describe this process below. Learning how to read and use these sources is a fundamental part of being a college student.

Tier 2: Reports, articles, and books from credible non-academic sources

Some events and trends are too recent to appear in Tier 1 sources. Also, Tier 1 sources tend to be highly specific, and sometimes you need a more general perspective on a topic. Thus, Tier 2 sources can provide quality information that is more accessible to non-academics. There are three main categories. First, official reports from government agencies or major international institutions like the World Bank or the United Nations; these institutions generally have research departments staffed with qualified experts who seek to provide rigorous, even-handed information to decision-makers. Second, feature articles from major newspapers and magazines like *The New York Times*, *The Wall Street Journal*, *The London Times*, or *The Economist* are based on original reporting by experienced journalists (not press releases) and are typically 1500+ words in length. Third, there are some great books from non-academic presses that cite their sources; they're often written by journalists. All three of these sources are generally well-researched descriptions of an event or state of the world, undertaken by credentialed experts who generally seek to be even-handed. It is still up to you to judge their credibility. Your instructors and campus librarians can advise you on which sources in this category have the most credibility.

Tier 3. Short pieces from periodicals or credible websites

A step below the well-developed reports and feature articles that make up Tier 2 are the short tidbits that one finds in newspapers and magazines or credible websites. How short is a short news article? Usually, they're just a couple paragraphs or less, and they're often reporting on just one thing: an event, an interesting research finding, or a policy change. They don't take extensive research and analysis to write, and many just summarize a press release written and distributed by an organization or business. They may describe things like corporate mergers, newly discovered diet-health links, or important school-funding legislation. You may want to cite Tier 3 sources in your paper if they provide an important factoid or two that isn't provided by a higher-tier piece, but if the Tier 3 article describes a particular study or academic expert, your best bet is to find the journal article or book it is reporting on and use that Tier 1 source instead. If the article mentions which journal the study was published in, you can go right to that journal through your library website. Sometimes you can find the original journal article by putting the scholar's name and some keywords into Google Scholar.

What counts as a credible website in this tier? You may need some guidance from instructors or librarians, but you can learn a lot by examining the person or organization providing the information (look for an "About" link). For example, if the organization is clearly agenda-driven or not up-front about its aims and/or funding sources, then it definitely isn't something you want to cite as a neutral authority. Also look for signs of expertise. A tidbit about a medical research finding written by someone with a science background carries more weight than the same topic written by a policy analyst. These sources are sometimes uncertain, which is all the more reason to follow the trail to a Tier 1 or Tier 2 source whenever possible.

Tier 4. Agenda-driven or pieces from unknown sources

This tier is essentially everything else, including Wikipedia.⁴ These types of sources—especially Wikipedia—can be hugely helpful in identifying interesting topics, positions within a debate, keywords to search on, and, sometimes, higher-tier sources on the topic. They often play a critically important role in the early part of the research process, but they generally aren't (and shouldn't be) cited in the final paper. Throwing some keywords into [Google](#) and seeing what you get is a fine way to get started, but don't stop there. Start a list of the people, organizations, sources, and keywords that seem most relevant to your topic. For example, suppose you've been assigned a research paper about the impact of linen production and trade on the ancient world. A quick Google search reveals that (1) linen comes from the flax plant, (2) the scientific name for flax is *Linum usitatissimum*, (3) Egypt dominated linen production at the height of its empire, and (4) Alex J. Warden published a book about ancient linen trade in 1867.

Similarly, you found some useful search terms to try instead of “ancient world” (antiquity, Egyptian empire, ancient Egypt, ancient Mediterranean) and some generalizations for linen (fabric, textiles, or weaving). Now you’ve got a lot to work with as you tap into the library catalog and academic article databases.

Practice Exercise 6.2.1

Choose a topic that interests you and find one source related to it in each of the four tiers. What could you learn from each source? What are the limitations of each source?

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6.3: Getting Familiar with Academic Journal Articles

Media Alternative

Listen to an audio version of this page (8 min, 2 sec):

Most of the Tier 1 sources available are academic articles, also called scholarly articles, scholarly papers, journal articles, academic papers, or peer-reviewed articles. They all mean the same thing: a paper published in an academic periodical after being scrutinized anonymously and judged to be sound by other experts in the subfield. Their origin explains both their basic structure and the high esteem they have in the eyes of your professors.

Many journals are sponsored by academic associations. Most of your professors belong to some big, general one (such as the [Modern Language Association](#), the [American Psychological Association](#), the National Association for Sport and Physical Education, or the American Physical Society) and one or more smaller ones organized around particular areas of interest and expertise (such as the [Association for the Study of Food and Society](#), the International Association for Statistical Computing, or the [Slavic and East European Folklore Association](#)). There are also generalist organizations organized by region of the country or state, such as the [Eastern Sociological Society](#) or the Southern Management Association. Each of these associations exists to promote the exchange of research findings and collaboration in their disciplines. Towards this end, they organize conferences, sponsor working groups, and publish one or more academic journals. These journals are meant to both publicize and archive the most interesting and important findings of the field.

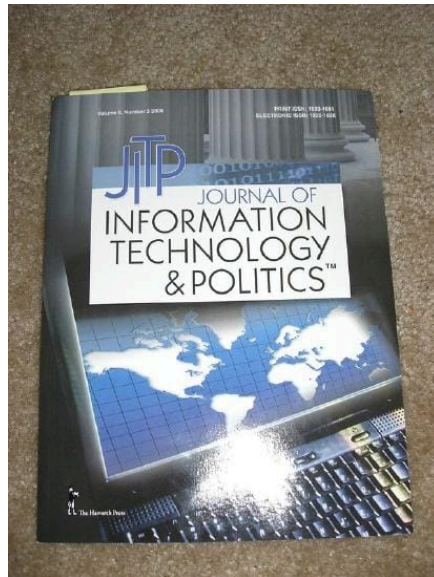


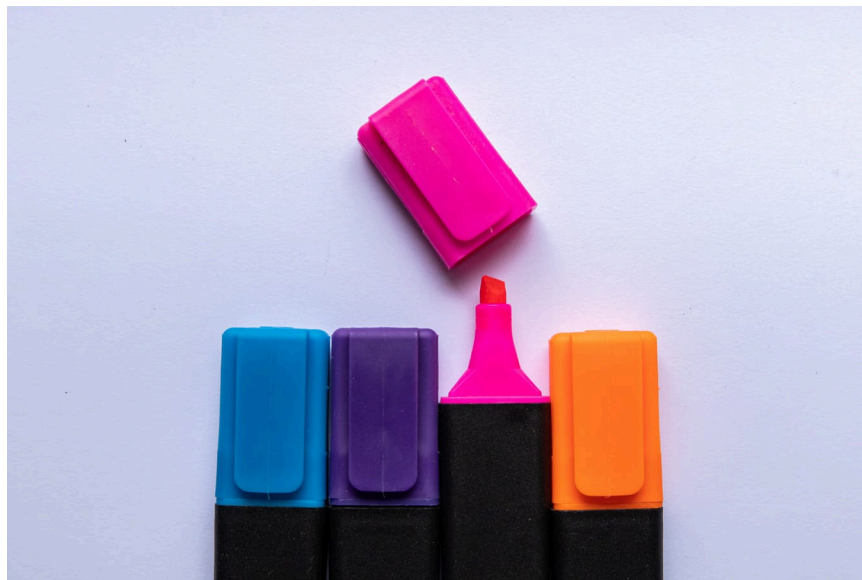
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Academic papers are essentially reports that scholars write to their peers—present and future—about what they've done in their research, what they've found, and why they think it's important. Thus, in a lot of fields they often have a structure reminiscent of the lab reports you've written for science classes:

1. **Abstract:** A one-paragraph summary of the article: its purpose, methods, findings, and significance.
2. **Introduction:** An overview of the key question or problem that the paper addresses, why it is important, and the key conclusion(s) (i.e., thesis or theses) of the paper.
3. **Literature review:** A synthesis of all the relevant prior research (the so-called “academic literature” on the subject) that explains why the paper makes an original and important contribution to the body of knowledge.
4. **Data and methods:** An explanation of what data or information the author(s) used and what they did with it.
5. **Results:** A full explanation of the key findings of the study.
6. **Conclusion/discussion:** Puts the key findings or insights from the paper into their broader context; explains why they matter.

Not all papers are so “sciencey.” For example, a historical or literary analysis doesn’t necessarily have a “data and methods” section; but they do explain and justify the research question, describe how the authors’ own points relate to those made in other relevant articles and books, develop the key insights yielded by the analysis, and conclude by explaining their significance. Some academic papers are review articles, in which the “data” are published papers and the “findings” are key insights, enduring lines of debate, and/or remaining unanswered questions.

Scholarly journals use a peer-review process to decide which articles merit publication. First, hopeful authors send their article manuscript to the journal editor, a role filled by some prominent scholar in the field. The editor reads over the manuscript and decides whether it seems worthy of peer review. If it’s outside the interests of the journal or is clearly inadequate, the editor will reject it outright. If it looks appropriate and sufficiently high quality, the editor will recruit a few other experts in the field to act as anonymous peer reviewers. The editor will send the manuscript (scrubbed of identifying information) to the reviewers who will read it closely and provide a thorough critique. Is the research question driving the paper timely and important? Does the paper sufficiently and accurately review all of the relevant prior research? Are the information sources believable and the research methods rigorous? Are the stated results fully justified by the findings? Is the significance of the research clear? Is it well written? Overall, does the paper add new, trustworthy, and important knowledge to the field? Reviewers send their comments to the editor who then decides whether to (1) reject the manuscript, (2) ask the author(s) to revise and resubmit the manuscript, or (3) accept it for publication. Editors send the reviewers’ comments (again, with no identifying information) to authors along with their decisions. A manuscript that has been revised and resubmitted usually goes out for peer-review again; editors often try to get reviews from one or two first-round reviewers as well as a new reviewer. The whole process, from start to finish, can easily take a year, and it is often another year before the paper appears in print.



Highlighting is just one strategy for reading academic journal articles strategically.

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Understanding the academic publication process and the structure of scholarly articles tells you a lot about how to find, read and use these sources:

1. **Find them quickly.** Instead of paging through mountains of dubious web content, go right to the relevant scholarly article databases in order to quickly find the highest quality sources.
2. **Use the abstracts.** Abstracts tell you immediately whether or not the article you’re holding is relevant or useful to the paper you’re assigned to write. You shouldn’t ever have the experience of reading the whole paper just to discover it’s not useful.
3. **Read strategically.** Knowing the anatomy of a scholarly article tells you what you should be reading for in each section. For example, you don’t necessarily need to understand every nuance of the literature review. You can just focus on why the authors claim that their own study is distinct from the ones that came before.
4. **Don’t sweat the technical stuff.** Not every social scientist understands the intricacies of log-linear modeling of quantitative survey data; however, the reviewers definitely do, and they found the analysis to be well constructed. Thus, you can accept the findings as legitimate and just focus on the passages that explain the findings and their significance in plainer language.
5. **Use one article to find others.** If you have one really good article that’s a few years old, you can use article databases to find newer articles that cited it in their own literature reviews. That immediately tells you which ones are on the same topic and offer newer findings. On the other hand, if your first source is very recent, the literature review section will describe the

other papers in the same line of research. You can look them up directly.

Students sometimes grumble when they're ordered to use scholarly articles in their research. It seems a lot easier to just Google some terms and find stuff that way. However, academic articles are the most efficient resource out there. They are vetted by experts and structured specifically to help readers zero in on the most important passages.

Practice Exercise 6.3.1

Enter a topic into a general subscription database that has both scholarly and non-scholarly sources (such as Academic Search Complete or Academic OneFile); browse the first few hits and classify each one as scholarly or not-scholarly. Look at the structure of the piece to make your determination.

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6.4: Searching for Journal Articles

Media Alternative

Listen to an audio version of this page (4 min, 43 sec):

Your campus library pays big money to subscribe to databases for Tier 1 articles. Some are general-purpose databases that include the most prominent journals across disciplines, such as Academic Search Premier (by EBSCO), Academic Search Complete (by EBSCO), Academic OneFile (by Cengage), General OneFile (by Cengage), ArticleFirst (by OCLC), and JSTOR (by ITHAKA). Some are specific to a particular discipline, such as PsycINFO (for psychology), CINAHL (for nursing), Environment Complete (for environmental science), Historical Abstracts (for history). Often they have the full-text of the articles right there for you to save or print. We won't go over particular databases here because every campus has different offerings. If you haven't already attended a workshop on using the resources provided by your library, you should. A one-hour workshop will save you many, many hours in the future. If there aren't any workshops, you can always seek advice from librarians and other library staff on the best databases for your topic. Many libraries also have online research guides that point you to the best databases for the specific discipline and, perhaps, the specific course. Librarians are eager to help you succeed with your research—it's their job and they love it!—so don't be shy about asking.

An increasingly popular article database is [Google Scholar](#). It looks like a regular Google search, and it aspires to include the vast majority of published scholarship. Google doesn't share a list of which journals they include or how Google Scholar works, which limits its utility for scholars. Also, because it's so wide-ranging, it can be harder to find the most appropriate sources. However, if you want to cast a wide net, it's a very useful tool.

Here are three tips for using Google Scholar effectively:

1. **Add your field** (economics, psychology, French, etc.) as one of your keywords.
If you just put in "crime," for example, Google Scholar will return all sorts of stuff from sociology, psychology, geography, and history. If your paper is on crime in French literature, your best sources may be buried under thousands of papers from other disciplines. A set of search terms like "crime French literature modern" will get you to relevant sources much faster.
2. **Don't ever pay for an article.**
When you click on links to articles in Google Scholar, you may end up on a publisher's site that tells you that you can download the article for \$20 or \$30. Don't do it! You probably have access to virtually all the published academic literature through your library resources. Write down the key information (authors' names, title, journal title, volume, issue number, year, page numbers) and go find the article through your library website. If you don't have immediate full-text access, you may be able to get it through inter-library loan.
3. **Use the "cited by" feature.**
If you get one great hit on Google Scholar, you can quickly see a list of other papers that cited it. For example, the search terms "crime economics" yielded this hit for a 1988 paper that appeared in a journal called *Kyklos*:

The economics of crime deterrence: a survey of theory and evidence

S Cameron - *Kyklos*, 1988 - Wiley Online Library

Since BECKER [1968] economists have generated a large literature on crime. Deterrence effects have figured prominently; few papers [eg HOCH, 1974] omit consideration of these. There are two reasons why a survey of the economics of deterrence is timely. Firstly, there ...

[Cited by 392](#) [Related articles](#) [All 5 versions](#) [Cite](#) [Save](#)

[Text description of Google Scholar results image](#)

1988 is nearly 30 years ago; for a social-science paper you probably want more recent sources. You can see that, according to Google, this paper was cited by 392 other sources. You can click on that "Cited by 392" to see that list. You can even search within that list of 392 if you're trying to narrow down the topic. For example, you could search on the term "cities" to see which of those 392 articles are most likely to be about the economic impact of crime on cities.

Practice Exercise 6.4.1

Choose a research topic, enter it into Google and then into Google Scholar and then into your library's biggest database search engine. Compare your results.

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6.5: Strategies for Each Phase of the Research Process

Media Alternative

Listen to an audio version of this page (5 min, 33 sec):

Finding good sources is a much more creative task than it seems on the face of it. It's an extended problem-solving exercise, an iterative cycle of questions and answers. Go ahead and use Wikipedia to get broadly informed if you want. It won't corrupt your brain. But use it, and all other sources, strategically. You should eventually arrive at a core set of Tier 1 sources that will enable you to make a well informed and thoughtful argument in support of your thesis. It's also a good sign when you find yourself deciding that some of the first sources you found are no longer relevant to your thesis; that likely means that you have revised and specified your thinking and are well on your way to constructing the kind of self-driven in-depth analysis that your professor is looking for.

Browsing for topics

Imagine you've been assigned a research paper that can focus on any topic relevant to the course. Imagine further that you don't have a clue about where to start and aren't entirely sure what counts as an appropriate topic in this discipline. A great approach is to find the top journals in the specific field of your course and browse through recent issues to see what people are publishing on. For example, when I assign an open-topic research paper in my Introduction to Sociology course, I suggest that students looking for a topic browse recent issues of *Social Problems* or *American Journal of Sociology* and find an article that looks interesting. They'll have a topic and—booyah!—their first source. An instructor of a class on kinesiology might recommend browsing *Human Movement Science*, the *Journal of Strength and Conditioning Research*, or *Perceptual and Motor Skills*.

Choosing keywords for your topic

When you have a topic and are looking for a set of sources, your biggest challenge is finding the right keywords. You'll obviously start with words and phrases from the assignment prompt, but you can't stop there. One strategy is to brainstorm keywords and keep track of what you have tried in a table like this one:

Coming up with Alternate Keywords

	Initial keywords	Alternate word or phrase	Alternate word or phrase	Related Terms
Example	iPhones and privacy	iPhone: Apple, smart phone, android	privacy: security, liberty, surveillance	data, data sharing, data harvesting, data economy, data privacy, data collection, digital footprint, informed consent, privacy policy

	Initial keywords	Alternate word or phrase	Alternate word or phrase	Related Terms	
Fill-in your topic & keywords as you work					

As explained above, lower-tier sources (such as Wikipedia) or the top-tier sources you already have are great for identifying alternative keywords, and librarians and other library staff are also well-practiced at finding new approaches to try. Librarians can also point you to the best databases for your topic as well.

Returning to find more sources

As you assess your evidence and further develop your thesis through the writing process, you may need to seek additional sources. For example, imagine you're writing a paper about the added risks adolescents face when they have experienced their parents' divorce. As you synthesize the evidence about negative impacts, you begin to wonder if scholars have documented some positive impacts as well. You go back and search until you find a fairly recent article such as Ilana Sever, Joseph Gutmann, and Amnon Lazar, "Positive Consequences of Parental Divorce Among Israeli Young Adults", *Marriage and Family Review* 42, no. 4 (2007): 7-28. Thus you delve back into the literature to look for more articles, find some more concepts and keywords (such as "resiliency"), assess new evidence, and revise your thinking to account for these broader perspectives. Your instructor may have asked you to turn in a bibliography weeks before the final paper draft. You can check with your professor, but he or she is probably perfectly fine with you seeking additional sources as your thinking evolves. That's how scholars write.

Practice Exercise 6.5.1

You can download the [keywords worksheet](#) or copy [the Google doc keywords worksheet](#) to complete the exercise.

1. Start with a phrase to describe a topic that interests you. Use a keywords table like the one above to generate alternate and related search terms.
2. Do a search on your original phrase and list the three best sources you come up with. Then do five additional searches, each one for a different related term or combination of terms taken from your keywords table. For each search, copy the titles and links for any good sources you find.
3. Reflect on which phrases led you to the sources that most interest you. Did you learn anything about how your topic is most commonly described? Do any alternate keywords suggest new ways to focus your topic?

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7: FORMING YOUR OWN ARGUMENT

7.1: Introductions

7.2: Organizing a Paper to Respond to Sources

7.3: Definition Arguments

7.4: Evaluation Arguments

7.5: Causal Arguments

7.6: Proposal Arguments

7.7: Tips for Paraphrasing and Quoting

7.8: Conclusions

7.1: Introductions

Media Alternative

Listen to an audio version of this page (33 min, 6 sec):

"In today's world ..."

Those opening words—so common in student papers—represent the most prevalent misconception about introductions: that they shouldn't really say anything substantive. The five-paragraph format that most students mastered before coming to college suggests that introductory paragraphs should start very general and gradually narrow down to the thesis. As a result, students frequently write introductions for college papers in which the first two or three (or more) sentences are patently obvious or overly broad. Charitable and well-rested instructors just skim over that text and start reading closely when they arrive at something substantive. Frustrated and overtired instructors emit a dramatic self-pitying sigh, assuming that the whole paper will be as lifeless and gassy as those first few sentences. If you've gotten into the habit of beginning opening sentences with the following phrases, firmly resolve to strike them from your repertoire right now:

- In today's world ...
- Throughout human history ...
- Since the dawn of time ...
- Webster's Dictionary defines [CONCEPT] as ...

For one thing, sentences that begin with the first three stems are often wrong. For example, someone may write, "Since the dawn of time, people have tried to increase crop yields." In reality, people have not been trying to increase crop yields throughout human history—[agriculture is only about 23,000 years old](#), after all—and certainly not since the dawn of time (whenever that was). For another, sentences that start so broadly, even when factually correct, could not possibly end with anything interesting.

Sometimes we know that more precise and vivid intros and conclusions are ideal but still settle on the vague language that seems familiar, safe, and do-able. Knowing the general form of academic writing (simplified in the five-paragraph theme) helps writers organize their thoughts; however, it leads some student writers to approach papers as mere fill-in-the-blank exercises.

I hope you will instead envision paper-writing as a task of working through an unscripted and nuanced thought process and then sharing your work with readers. When you're engaged with the writing process, you'll find yourself deciding which substantive points belong in those introductory and concluding paragraphs rather than simply filling those paragraphs out with fluff. They should be sort of hard to write; they're the parts of the paper that express your most important ideas in the most precise ways. If you're struggling with intros and conclusions, it might be because you're approaching them in exactly the right way. Having a clear, communicative purpose will help you figure out what your reader needs to know to really understand your thinking.

So what should you do? Well, start at the beginning. By that I mean, start explaining what the reader needs to know to comprehend your thesis and its importance. For example, compare the following two paragraphs.

Five-paragraph theme version of a paragraph:

Throughout time, human societies have had religion. Major world religions since the dawn of civilization include Zoroastrianism, Hinduism, Animism, Judaism, Christianity, and Islam. These and all other religions provide a set of moral principles, a leadership structure, and an explanation for unknown questions such as what happens after people die. Since the dawn of religion, it has always been opposed to science because one is based on faith and the other on reason. However, the notion of embodied cognition is a place where physical phenomena connect with religious ones. Paradoxically, religion can emphasize a deep involvement in reality, an embodied cognition that empowers followers to escape from physical constraints and reach a new spirituality. Religion carefully constructs a physical environment to synthesize an individual's memories, emotions, and physical actions, in a manner that channels the individual's cognitive state towards spiritual transcendence.

Organically structured version of the same paragraph:

Religion is an endeavor to cultivate freedom from bodily constraints to reach a higher state of being beyond the physical constraints of reality. But how is it possible to employ a system, the human body, to transcend its own limitations? Religion and science have always had an uneasy relationship as empiricism is stretched to explain religious phenomena, but psychology has recently added a new perspective to the discussion. *Embodiment* describes the interaction between humans and the environment that lays a foundation for cognition and can help explain the mechanisms that underlie religion's influence on believers. This is a rare moment where science and religion are able to coexist without the familiar controversy. Paradoxically, religion can emphasize a deep involvement in reality, an *embodied cognition* that empowers followers to escape from physical constraints and reach a new spirituality. Religion carefully constructs a physical environment to synthesize an individual's memories, emotions, and physical actions, in a manner that channels the individual's cognitive state towards spiritual transcendence.

In the first version, the first three sentences state well-known facts that do not directly relate to the thesis. The fourth sentence is where the action starts, though that sentence ("Since the dawn of religion, it has always been opposed to science because one is based on faith and the other on reason") is still overstated: when was this dawn of religion? And was there "science," as we now understand it, at that time? The reader has to slog through to the fifth sentence before the intro starts to develop some momentum.

Training in the five-paragraph theme format seems to have convinced some student writers that beginning with substantive material will be too abrupt for the reader. But the second example shows that a meatier beginning isn't jarring; it is actually much more engaging. The first sentence of the organic example is somewhat general, but it specifies the particular aspect of religion (transcending physical experience) that is germane to the thesis. The next six sentences lay out the ideas and concepts that explain the thesis, which is provided in the last two sentences. Overall, every sentence is needed to thoroughly frame the thesis. It is a lively paragraph in itself, and it piques the reader's interest in the author's original thinking about religion.

Sometimes a vague introductory paragraph reflects a simple, obvious thesis and a poorly thought-out paper. More often, though, a shallow introduction represents a missed opportunity to convey the writer's depth of thought from the get-go. Students adhering to the five-paragraph theme format sometime assume that such vagueness is needed to bookend an otherwise pithy paper. As you can see from these examples, that is simply untrue. I've seen some student writers begin with a vague, high-school style intro (thinking it obligatory) and then write a wonderfully vivid and engaging introduction as their second paragraph. Other papers I've seen have an interesting, original thesis embedded in late body paragraphs that should be articulated up front and used to shape the whole body. If you must write a vague "since the dawn of time" intro to get the writing process going, then go ahead. Just budget the time to rewrite the intro around your well developed, arguable thesis and ensure that the body paragraphs are organized explicitly by your analytical thread.

Here are two more examples of excellent introductory paragraphs written by undergraduate students in different fields. Note how, in both cases, (1) the first sentence has real substance, (2) every sentence is indispensable to setting up the thesis, and (3) the thesis is complex and somewhat surprising. Both of these introductory paragraphs set an ambitious agenda for the paper. As a reader, it's pretty easy to imagine how the body paragraphs that follow will progress through the nuanced analysis needed to carry out the thesis.

From Davis O'Connell's "Abelard":

He rebelled against his teacher, formed his own rival school, engaged in a passionate affair with a teenager, was castrated, and became a monk. All in a day's work. Perhaps it's no surprise that Peter Abelard gained the title of "heretic" along the way. A 12th-century philosopher and theologian, Abelard tended to alienate nearly everyone he met with his extremely arrogant and egotistical personality. This very flaw is what led him to start preaching to students that he had stolen from his former master, which further deteriorated his reputation. Yet despite all of the senseless things that he did, his teachings did not differ much from Christian doctrine. Although the church claimed to have branded Abelard a heretic purely because of his religious views, the other underlying reasons for these accusations involve his conceited personality, his relationship with the 14-year-old Heloise, and the political forces of the 12th century.

From Logan Skelly's "Staphylococcus aureus"³:

Bacterial resistance to antibiotics is causing a crisis in modern healthcare. The evolution of multi-drug resistant *Staphylococcus aureus* is of particular concern because of the morbidity and mortality it causes, the limited treatment options it poses, and the difficulty in implementing containment measures for its control. In order to appreciate the virulence of *S. aureus* and to help alleviate the problems its resistance is causing, it is important to study the evolution of antibiotic resistance in this pathogen, the mechanisms of its resistance, and the factors that may limit or counteract its evolution. It is especially important to examine how human actions are causing evolutionary changes in this

bacterial species. This review will examine the historical sequence of causation that has led to antibiotic resistance in this microorganism and why natural selection favors the resistant trait. It is the goal of this review to illuminate the scope of the problem produced by antibiotic resistance in *S. aureus* and to illustrate the need for judicious antibiotic usage to prevent this pathogen from evolving further pathogenicity and virulence.

If vague introductory paragraphs are bad, why were you taught them? In essence, you were taught the form so that you could later use it to deepen your thinking. By producing the five-paragraph theme over and over, it has probably become second nature for you to find a clear thesis and shape the intro paragraph around it, tasks you absolutely must accomplish in academic writing. However, you've probably been taught to proceed from "general" to "specific" in your intro and encouraged to think of "general" as "vague". At the college level, think of "general" as context: begin by explaining the conceptual, historical, or factual context that the reader needs in order to grasp the significance of the argument to come. It's not so much a structure of general-to-specific; instead, it's context-to-argument.

¹ This example is slightly adapted from a student-authored essay: Victor Seet, "Embodiment in Religion," *Discoveries*, 11 (2012). *Discoveries* is an annual publication of the Knight Institute for Writing in the Disciplines of Cornell University which publishes excellent papers written by Cornell undergraduates.

² Davis O'Connell, "Abelard: A Heretic of a Different Nature," *Discoveries* 10 (2011): 36-41.

³ Logan Skelly, "Staphylococcus aureus: The Evolution of a Persistent Pathogen," *Discoveries* 10 (2011): 89-102.

Exercise 7.1.1

Browse online articles on *The New York Times*, *The Washington Post*, Medium.com, *The Atlantic*, *Time*, or other reputable websites, journals, or newspapers. Find an article where the introduction really engages you. Read the whole article, post a link to it, and reflect in your discussion post on why you found it so compelling. Did it meet the following three criteria described in this section?

If it did meet those criteria, how was the thesis surprising?

1. The first sentence has real substance,
2. Every sentence is indispensable to setting up the thesis, and
3. The thesis is complex and somewhat surprising.

Exercise 7.1.2

Choose one of the essays from [Section 12.1: Suggested Short Readings](#). Read the whole essay and reflect in your discussion post on the introduction. Did it meet the following three criteria described in this section? If so, how was the thesis surprising?

Do you have any ideas for how it could be improved?

1. The first sentence has real substance,
2. every sentence is indispensable to setting up the thesis, and
3. the thesis is complex and somewhat surprising.

Exercise 7.1.3

Choose an essay you have written in this or another class and rewrite the introduction to improve it according to the principles in this section. Write an additional paragraph of reflection on how the new introduction would make a stronger impression on readers and better serve your purpose in the essay.

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7.2: Organizing a Paper to Respond to Sources

Media Alternative

Listen to an audio version of this page (8 min, 52 sec):

Before we start talking about how to choose search terms and where to search for sources, it can help to get a sense of what we're hoping to get out of the research. We might think that in order to support a thesis we should only look for sources that prove an idea we want to promote. But since writing academic papers is about joining a conversation, what we really need is to gather the sources that will help us situate our ideas within that ongoing conversation. What we should look for first is not support but the conversation itself: who is saying what about our topic?

The sources that make up the conversation may have various kinds of points to make and ultimately may play very different roles in our paper. After all, as we have seen in [Chapter 2](#), an argument can involve not just evidence for a claim but limits, counterarguments, and rebuttals. Sometimes we will want to cite a research finding that provides strong evidence for a point; at other times, we will summarize someone else's ideas in order to explain how our own opinion differs or to note how someone else's concept applies to a new situation.

As you find sources on a topic, look for points of connection, similarity and difference between them. In your paper, you will need to show not just what each one says, but how they relate to each other in a conversation. Describing this conversation can be the springboard for your own original point.



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Here are five common ways research papers can build on multiple sources to come up with an original point:

1. **Combine research findings from multiple sources to make a larger summary argument.** You might find that none of the sources you're working with specifically claim that early 20th-century British literature was preoccupied with changing gender roles but that, together, their findings all point to that broader conclusion.
2. **Combine research findings from multiple sources to make a claim about their implications.** You might review papers that explore various factors shaping voting behavior to argue that a particular voting-reform proposal will likely have positive impacts.
3. **Identify underlying areas of agreement.** You may argue that the literature on cancer and the literature on violence both describe the unrecognized importance of prevention and early intervention. This similarity will support your claim that

insights about one set of problems may be useful for the other.

4. **Identify underlying areas of disagreement.** You may find that the controversies surrounding educational reform—and its debates about accountability, curricula, school funding—ultimately stem from different assumptions about the role of schools in society.
5. **Identify unanswered questions.** Perhaps you review studies of the genetic and behavioral contributors to diabetes in order to highlight unknown factors and argue for more in-depth research on the role of the environment.

There are certainly other ways authors use sources to build theses, but these examples illustrate how original thinking in academic writing involves making connections with and between a strategically chosen set of sources.

Here's a passage of academic writing (an excerpt, not a complete paper) that gives an example of how a writer can describe a conversation among sources and use it to make an original point:

Willingham (2011) draws on cognitive science to explain that students must be able to regulate their emotions in order to learn. Emotional self-regulation enables students to ignore distractions and channel their attention and behaviors in appropriate ways. Other research findings confirm that anxiety interferes with learning and academic performance because it makes distractions harder to resist (Perkins and Graham-Bermann, 2012; Putwain and Best, 2011). Other cognitive scientists point out that deep learning is itself stressful because it requires people to think hard about complex, unfamiliar material instead of relying on cognitive short-cuts.

Kahneman (2011) describes this difference in terms of two systems for thinking: one fast and one slow. Fast thinking is based on assumptions and habits and doesn't require a lot of effort. For example, driving a familiar route or a routine grocery-shopping trip are not usually intellectually taxing activities. Slow thinking, on the other hand, is what we do when we encounter novel problems and situations. It's effortful, and it usually feels tedious and confusing. It is emotionally challenging as well because we are, by definition, incompetent while we're doing it, which provokes some anxiety. Solving a tough problem is rewarding, but the path itself is often unpleasant.

These insights from cognitive science enable us to critically assess the claims made on both sides of the education reform debate. On one hand, they cast doubt on the claims of education reformers that measuring teachers' performance by student test scores is the best way to improve education. For example, the [Center for Education Reform](#) promotes "the implementation of strong, data-driven, performance-based accountability systems that ensure teachers are rewarded, retained and advanced based on how they perform in adding value to the students who they teach, measured predominantly by student achievement." The research that Willingham (2011) and Kahneman (2011) describe suggests that frequent high-stakes testing may actually work against learning by introducing greater anxiety into the school environment.

At the same time, opponents of education reform should acknowledge that these research findings should prompt us to take a fresh look at how we educate our children. While Stan Karp of [Rethinking Schools](#) is correct when he argues that "data-driven formulas [based on standardized testing] lack both statistical credibility and a basic understanding of the human motivations and relationships that make good schooling possible," it doesn't necessarily follow that all education reform proposals lack merit. Challenging standards, together with specific training in emotional self-regulation, will likely enable more students to succeed.

In that example, the ideas of Willingham and Kahneman are summarized approvingly, bolstered with additional research findings, and then applied to a new realm: the current debate surrounding education reform. Voices in that debate were portrayed as accurately as possible, sometimes with representative quotes. Most importantly, all references were tied directly to the author's own interpretative point, which relies on the source's claims.

As you can see, there are times when you should quote or paraphrase sources that you don't agree with or do not find particularly compelling. They may convey ideas and opinions that help explain and justify your own argument. Whether or not we agree with a source, we can focus on what it claims and how exactly its claims relate to other sources and to our own ideas.

¹Gerald Graff and Cathy Birkenstein, *They Say/I Say: The Moves That Matter in Academic Writing*, (New York: W.W. Norton & Co, 2009).

²The sources cited in this example:

- [Daniel T. Willingham, "Can teachers increase students' self control?" American Educator 35, no. 2 \(2011\): 22-27.](#)
- Kahneman, *Thinking, Fast and Slow*.
- [Suzanne Perkins and Sandra Graham-Bermann, "Violence exposure and the development of school-related functioning: mental health, neurocognition, and learning," *Aggression and Violent Behavior* 17, no. 1\(2012\): 89-98.](#)
- [David William Putwain and Natalie Best, "Fear appeals in the primary classroom: Effects on test anxiety and test grade," *Learning and Individual Differences* 21, no. 5 \(2011\): 580-584.](#)

Practice Exercise 7.2.1

Browse the website [TheConversation.com](https://www.theconversation.com) and select an article that interests you. Read it and reflect on how it uses sources. Which of the five ways of using sources listed above best describes its approach? Next, reread it looking for sentences that stand out. Select one memorable phrase or sentence that you would quote if you were writing an essay about this piece. Explain why you chose it. Select another point that you would paraphrase and explain why that one doesn't need to be quoted.

Attributions

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7.3: Definition Arguments

Media Alternative

Listen to an audio version of this page (14 min, 32 sec):

What is a definition argument?

A research-based argument may have as its goal to describe the nature of something, whether it be an abstract concept like justice, a historical event, or an ongoing trend. Definition arguments like this are arguments because they seek to shape our vision of reality. We can think of them as answering the question "What is it?"



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Definition arguments may attempt to explain what is meant by a particular term. Take the following claim:

Organic, in terms of food, means plants and animals raised without additives or artificial growing conditions.

The argument here hinges upon understanding the definition of the word “organic.” In this case, organic is the subject of the argument. The claim goes on to base the argument on definition criteria. The claim states that two definition criteria of “organic” are “raised without additives” and “raised without artificial growing conditions.” “What do they mean by ‘artificial’?” If you find yourself questioning other terms used in the claim, that might mean your argument will need to dedicate a paragraph or more to defining those terms. An extended argument on organic food would need to explain in detail what distinguishes artificial growing conditions from natural ones. Can greenhouse-grown food be organic? In such a situation, it may benefit the argument to offer the dictionary definition of “organic” as a way to confirm that writer and the readers’ assumptions are the same.

There are a number of online dictionaries that student authors can derive a definition from, but should the writer wish to ensure trust (ethos) with the audience, the source of the dictionary definition might matter. The [dictionary.com](https://www.dictionary.com) site offers this definition for “organic”:

Organic: pertaining to, involving, or grown with fertilizers or pesticides of animal or vegetable origin, as distinguished from manufactured chemicals” (“organic”).

Readers who respect the history and legacy of the [Oxford English Dictionary \(OED\)](https://www.oed.com) might consider its definition more credible. Considered the most definitive and complete dictionary available, the OED offers differentiated definitions of different uses of

the word. In the case of “organic,” we’d need to look at sub-definition 8c to find one that works for our purposes:

Organic: of food: produced without the use of artificial fertilizers, pesticides, or other artificial chemicals.

A definition argument can put a more specific subject into a category based on criteria, as in the following:

Though it omits hormones and antibiotics, organic ice cream remains unhealthy because it contains high levels of fat and sugar, while offering little nutritional value.

Here we have a subject – organic ice cream – and a category – unhealthy. Presumably, unhealthy things often contain similar criteria – high levels of fat and sugar, low nutritional value, and industrial additives. Organic ice cream might not contain industrial additives, but, because it meets the other two criteria, it can still be considered unhealthy. A good way to test your thesis is to try out examples to see if the criteria work to distinguish things that fit the category from things that don't. Are other things we consider unhealthy full of sugar and/or fat, low in nutrition, and made with industrial additives? Yes. Fast food hamburgers are unhealthy because they contain high levels of fat, low nutritional value, and are full of chemical preservatives.

Definition arguments will need to provide evidence for any generalizations they make about a subject. If they use a specific example, how can they show that the example is **typical**? They may also need to justify the choice of **criteria** for the definition. If we argue that the Vietnam War should not be considered a “World War” even though it involved two global superpowers, the U.S. and the Soviet Union, we will need to explain why a criterion like the number of deaths should be considered more important than the number or size of the countries involved.

The benefits of definition

Once we understand the value of definition for clarifying terms in an essay, we can start to appreciate the value of definition in shaping an argument, especially one centered around a contentious term. When controversy revolves around an issue, defining terms explicitly and precisely is even more critical. In [Section 4.2: Check If the Meaning Is Clear](#), we saw how mixing different meanings of one term can disguise a problem with the logic of an argument (if this is done intentionally, it is called **equivocation**). A definition argument can help avoid this kind of slippage, and it can clarify where disagreements lie. Even if it doesn't resolve the disagreements, it may at least prevent misunderstandings.

One example lies in the definition of “life” in the abortion debate. Those on the pro-life side argue “life” is defined by the initial meeting of sperm and egg, and the subsequent division of cells. On the other hand, those on the pro-choice side often argue that “life” is determined by autonomy, by the fetus's ability to survive outside the womb, and this, generally, is possible at twenty-four weeks. Prior to that, the fetus is fully dependent for survival upon the security of the woman's womb.

To take another example, let's say the government decides to allow health insurance providers to exclude coverage to individuals with preexisting conditions. The question then arises, what precisely does constitute a preexisting condition? Any diagnosis of cancer, including minor skin cancers? Diabetes? Obesity? Hypertension? Consider how many of our friends and family members have been diagnosed with any of these conditions.

Laws rely on definitions. Many of us are familiar with the purpose of Title IX, which ensured that equal funding should be applied for both male and female athletic programs in schools. However, with the recognition of transgender students and their rights, the [U.S. Department of Education](#) offered a statement of clarification to the language of Title IX: “explaining that it will enforce Title IX's prohibition on discrimination on the basis of sex to include: (1) discrimination based on sexual orientation; and (2) discrimination based on gender identity” (“Title IX”). Schools, students, and parents can now point to this language in debates about who is protected by Title IX status, and who can be included in the funding of gender-specific sports teams. Legal definitions often depend upon qualifiers, as in the case of the gun debate. Many on the pro-gun rights argument will not extend the definition of guns to include fully automatic guns; thus, they will often only agree with new gun restrictions that exclude AR 47s from such regulations.

Definitions involve emotional associations as well as descriptions of literal meaning. Public opinion can be swayed by casting a person involved in a very public event as “famous” or “infamous,” a term that has decidedly negative connotations. In the case of Trayvon Martin, a young black man who was shot by George Zimmerman, a white man, Martin was defined alternately as a “boy in a hoodie” or as a “potential thug.” And Zimmerman was defined as “a neighborhood watch leader” or “private citizen” by some, and a “vigilante” by others. In each case, the label implies a definition of the person and his behavior, and this extends the impression built in the mind of the audience.

Strategies for definition

Referring to existing definitions

A dictionary definition can be helpful if the term under consideration is new or very unusual or uncommon, words which readers may be unfamiliar with, or whose definitions may have become obscured with modern use. If an argument takes the position that reduced literacy rates in freshman college students makes them less apt to learn from a professor who leans toward sesquipedalian speech, yet, such speech is exactly the challenge these students need to pull them away from their social media feeds and engage them in the vigorous mental workout that academia provides, the author is more likely to earn the trust of the audience if a dictionary definition is provided for this uncommon and archaic word: words that are a foot and a half long (O.E.D.).

Identifying emotional associations (connotations)

Emotional associations offer the various levels of meaning a word may have. For example, love can have several variants, such as platonic love, romantic love, familial love, passionate love, self-love, and even more specific ones, such as spirituality, philanthropy, humanity, nationalism/patriotism, and *agapé*, and each carries its own emotional tone which informs the definition. The essay "What is Poverty" offers multiple connotations of poverty through the numerous illustrations.

Defining a term based on what it's not (negation)

Sometimes complex words are best explained by what they are *not*, specifically by contrasting the word to another term. Needs are often confused with wants, but needs are anything necessary for survival. For example, people often say "I need a vacation," when what they really mean is, "I want a vacation." You may *want* coffee, but you *need* water. You may *want* a new car, but a used one may suit your *needs*. In an article about sexual predators, [Andrew Vachss](#) says that when he tells people about the individuals he prosecutes for abuse against children, people often say, "that's sick." But he clarifies that there is a difference between "sick" and "evil." A mother who hears voices in her head telling her to lock her baby in a closet is sick. A man who sells a child to pornographers is evil. "Sickness," he says, "is the absence of choice," while evil is the volition, the awareness of choice, and the intentional choice to commit a sinister act (Vachss).

Creating an original definition (stipulation)

This use of definition asks the reader to accept an alternate definition from the standard or commonly accepted one. This is usually the best way to utilize definition in an essay, as it allows the author the freedom to put his or her own spin on a key term. But the author must do it responsibly, providing supportive examples. For example, many young people believe that true parental love is the willingness to do *anything at all* for a child. However, real love isn't expressed by doormat behavior. A parent who does his child's homework so the child receives all "A" grades isn't demonstrating love (*note the use of negation here*). Rather, true parental love is the willingness to apply fair rules and limits on behavior in order to raise a child who is a good worker, a good friend, and a good citizen.

Elaborating on a definition (extended definition)

There is no rule about how long a definition argument should be. When a simple one-line definition will not suffice, writers can develop a multi-paragraph, multi-page or multi-chapter definition argument. For example, a newspaper article might explore at length what is meant by the phrase "cancel culture." An entire book each might be needed to explain what is meant by the following terms: "critical race theory," "microaggression," "gender identity," "fascism," or "intersectionality." When the concept under examination is complex, contentious, or weighted by historical examples and emotional connotations, an extended definition may be needed.

Sample definition arguments

This [sample outline for an essay titled "When Colleges Talk about Diversity, Equity, and Antiracism, What Do They Mean?"](#) shows the structure of one definition argument.

The student essay "Defining Stereotypes" by Imanol Juarez can serve as another example. Annotations on this essay point out

how Juarez uses several definition argument strategies.

- [Sample definition essay "Defining Stereotypes" in PDF version with margin notes](#)
- [Sample definition essay "Defining Stereotypes" accessible version with notes in parentheses.](#)

Practice Exercise 7.3.1

How are attitudes to gender changing in today's society? Come up with a definition argument you think has some validity about a current trend related to gender. What kind of evidence could be gathered to support this claim? How would you convince readers that this evidence is typical? You could choose one of the claims below or invent your own.

- People today still associate femininity with weakness and masculinity with strength.
- Women are still more nurturing than men.
- Teenagers today see gender as a spectrum.
- Cisgender people still fear transgender people.

Answer available at the end of this section.

Practice Exercise 7.3.2

Construct a definition with criteria for one of the following terms, or another term of your choice related to gender. Feel free to research the terms to get ideas. Possible terms: masculine, feminine, androgynous, macho, femme, butch, manly, womanly, machista, metrosexual, genderqueer, third gender, transgender.

Practice Exercise 7.3.3

Choose one of the following articles. Which of the [definition strategies](#) listed in this section can you identify in the argument? Can you think of any other strategies the author might have used?

- ["The True Meaning of the Word 'Cisgender'"](#) by Dawn Ennis in *The Advocate*
- ["The Definition of Terrorism"](#) by Brian Whitaker in *The Guardian*

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Answers

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7.4: Evaluation Arguments

Media Alternative

Listen to an audio version of this page (3 min, 42 sec):

What is an evaluation argument?

In college, professional life, politics, and everyday life, we constantly must assess how things measure up. We are faced with questions like the following:

- Does our employer treat us fairly?
- Does our local cafe deserve five stars or four?
- Is the “Free City” program that makes City College of San Francisco tuition free for residents a success?
- Is a particular hillside a good location for a wind farm?
- Does the president deserve their current approval rating?

To answer each of these questions and convince others that our answer is valid, we would need to make an evaluation argument. Most commonly, evaluation arguments rate their subject on a scale from positive to negative. Evaluation arguments make a claim about the quality of something. We can think of them as answering the question “How good or bad is it?”



A convincing evaluation depends on careful thought about the criteria.
Photo by [Liza Summer](#) from [Pexels](#) under the [Pexels License](#).

Criteria

Evaluation arguments usually need to define and justify the **criteria** they use to make the evaluation. These criteria may consist of moral standards, aesthetic standards, or tests of successful functioning. Depending on how controversial the criteria are, the argument may need to defend and explain why they have been chosen. How can we support our choice of criteria? We may cite precedent or the authoritative sources in the field, or we may discuss the merit of the criteria in themselves by arguing for the good results they lead to and aligning them with values we believe our audience will share.

Judgment

Once we have convinced readers that the criteria for quality are valid, we will need to articulate our **judgment** about the extent to which the subject meets or doesn't meet those criteria.

Evidence

Finally, the argument will need to provide **evidence** of the way in which the subject meets or does not meet the criteria. See [4.4: Decide How Strong the Evidence Is](#) and [12.5: Developing Paragraphs](#) for ideas on the types of evidence to choose from.

Ranking criteria

In cases where there are multiple valid criteria, the writer may need to **rank** them in order of importance and justify this ranking. For example, an editorial supporting Alyesha Jenkins for mayor would need to explain what the city should be looking for in a mayor at the moment. The editorial might argue that the top priority should be finding someone who has a workable plan to address the homelessness crisis. It might then go on to identify as secondary priority finding someone who has been an effective leader of a large organization. Finally, it might argue that finding a candidate who will focus on ending police brutality in the city should be the third priority. Given these criteria, the argument might praise describe Alyesha Jenkins' concrete, popular plan on homelessness and background as a successful city supervisor and head of a law firm. It might note that her record on police brutality is limited, but we still judge her to be a strong candidate.

Types of criteria

We can classify evaluative arguments by the kind of criteria they use. They may focus on aesthetics, that is the appearance or appeal of something (a movie, a work of art, or a building), or practical concerns about how something functions, or moral judgements based on values.

Aesthetic Criteria

What makes a great film can be an academic question or an everyday debate among friends going to the movies. Film critics and Film Studies classes try to identify clear **aesthetic criteria** for award-worthy movies. Film blogger [Tyler Schirado](#), who writes for the San Diego Film festival, details criteria including acting quality, dialogue, pacing, plot coherence, cinematography, production design, and special effects. Each of those criteria could in turn include sub-criteria. For example, the criteria for the quality of the special effects might include both how innovative and how spectacular they are.

Operational Criteria

Sometimes the criteria that matter are very practical. We use **operational criteria** when we are looking for certain concrete results. What does the subject we are evaluating do? If we want to evaluate a new car's safety features, we will ended to see how it performs under challenging conditions. When the FDA evaluates and tests a new vaccine, they follow an set of procedures to test how the vaccine affects first cells, then animal bodies, and finally human bodies. The FDA considers the results of all these procedures to help it decide whether to approve the vaccine or not. And if the consumer has confidence in the FDA's standards for data collection, they can use the criteria about the vaccine's past record of immune protection and side effects to help them decide whether or not to get vaccinated.

Moral Criteria

An evaluation argument based on **moral criteria** will claim that something is right or wrong. It will need to appeal to shared values or make a case for a particular value that serves as criteria. Some values are nearly universal, such as honesty, reasonableness, and fairness, as we will discuss in [9.6: Moral Character](#). However, even values that seem universal may be defined differently by different groups. We each grow up in an environment that instills a particular set of family or cultural or religious values. These help to shape our own sense of morality, or personal values and codes that we chose to live by.

Many values may be unconsciously held, but a moral argument will need to articulate them explicitly in order to make its

case. Remembering our discussion of assumptions in [4.5: Check the Argument's Assumptions](#), we recall that each argument is based upon spoken or unspoken beliefs (warrants), such as “free speech is worthy of protection,” or “democracy is desirable,” or “cheating is wrong.” As we saw in [7.2: Tailoring an Argument to an Audience](#), it can be helpful to recognize our particular audience's values and see where they align with our own. Convincing readers that we share values can enhance the sense of trust between reader and writer, as we will see in [Chapter 9: How Arguments Appeal to Trust and Connection \(Ethos\)](#).

As an example, the Motion Pictures Academy includes some moral criteria as well as aesthetic criteria when it selects winners for Best Picture, Best Director, and Best Actors. Responding to the #OscarsSoWhite campaign, the Academy of Motion Pictures decided to incorporate the value of inclusiveness into their criteria. In order to emphasize “the inclusion of people in underrepresented groups, including women, people of color, LGBTQ+ people and those with cognitive or physical disabilities,” they developed a [new set of criteria for nominations for Best Picture](#). The criteria state that starting in 2024, “To be eligible for best picture, a film must meet at least two standards across four categories: ‘Onscreen Representation, Themes and Narratives,’ ‘Creative Leadership and Project Team,’ ‘Industry Access and Opportunities’ and ‘Audience Development,’ (Rottenberg). Each of these new criteria responds to the demands for inclusivity and equity, and is evidence that criteria can and should evolve as social morals evolve.

Comparative Evaluation

Many times we will need to evaluate the worth of one subject in relation to another in order to judge which is better. Of course, we will need to decide on the basis for comparison, or the criteria to be used, and make that basis clear. Then we will need to evaluate each subject according to the criteria. In comparisons, ranking the criteria will often be important because one subject may do better on one criterion and worse on another. We'll need to know which criterion is more important in order to decide which comes out ahead overall.

The point-by-point organizational technique described in [3.9: Comparing and Contrasting Arguments](#) can be helpful in structuring such an essay because it allows us to write about one criterion at a time and see how both subjects compare on that one point before moving on to the next criterion. For example, we might compare the job of being a nanny with the job of being a preschool teacher. In one section, we would compare earnings for each job, and in another section, we would discuss potential for professional growth. If nannies come out ahead on earnings and teachers come out ahead on professional growth opportunities, then we will need to rank these criteria in order of importance to decide which job to recommend.

Sample evaluation arguments

To get a sense of what research-based evaluation arguments look like in college classes, see this [sample evaluation argument essay prompt](#) and the [sample outline](#) to match it. For a full sample evaluation essay, see “Universal Health Care Coverage for the United States.” Annotations on that essay point out how the author uses evaluation argument strategies. We offer it in two formats:

- [Sample evaluation essay "Universal Health Care Coverage for the United States" in PDF version with margin notes](#)
- [Sample evaluation essay "Universal Health Care Coverage for the United States" accessible version with notes in parentheses](#)

Practice Exercise 7.4.1

Reflect on the following questions to construct your own evaluation argument.

- What makes a person a good role model? Choose your top three criteria.
- How would you rank those criteria in order of importance?
- Choose two prominent public figures from history, pop culture or politics, dead or alive, who would be interesting to compare as role models.
- Evaluate each person according to the three criteria you identified.
- Which figure comes out as the better role model?
- If you ranked the criteria differently, would the other one come out ahead?
- What is most controversial in your evaluation? Is it the choice of criteria, the ranking of the criteria, or the idea that your figure fits certain criteria?

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7.5: Causal Arguments

Media Alternative

Listen to an audio version of this page (13 min, 57 sec):

Causal arguments attempt to make a case that one thing led to another. They answer the question "What caused it?" Causes are often complex and multiple. Before we choose a strategy for a causal argument it can help to identify our purpose. Why do we need to know the cause? How will it help us?

Purposes of causal arguments

To get a complete picture of how and why something happened

In this case, we will want to look for multiple causes, each of which may play a different role. Some might be background conditions, others might spark the event, and others may be influences that sped up the event once it got started. In this case, we often speak of **near causes** that are close in time or space to the event itself, and **remote causes**, that are further away or further in the past. We can also describe a **chain of causes**, with one thing leading to the next, which leads to the next. It may even be the case that we have a **feedback loop** where a first event causes a second event and the second event triggers more of the first, creating an endless circle of causation. For example, as sea ice melts in the arctic, the dark water absorbs more heat, which warms it further, which melts more ice, which makes the water absorb more heat, etc. If the results are bad, this is called a vicious circle.

To decide who is responsible

Sometimes if an event has multiple causes, we may be most concerned with deciding who bears responsibility and how much. In a car accident, the driver might bear responsibility and the car manufacturer might bear some as well. We will have to argue that the responsible party caused the event but we will also have to show that there was a moral obligation not to do what the party did. That implies some degree of choice and knowledge of possible consequences. If the driver was following all good driving regulations and triggered an explosion by activating the turn signal, clearly the driver cannot be held responsible.

In order to determine that someone is responsible, there must be a clearly defined **domain of responsibility** for that person or entity. To convince readers that a certain party is responsible, readers have to agree on what the expectations for that party in their particular role are. For example, if a patient misreads the directions for taking a drug and accidentally overdoses, does the drug manufacturer bear any responsibility? What about the pharmacist? To decide that, we need to agree on how much responsibility the manufacturer has for making the directions foolproof and how much the pharmacist has for making sure the patient understands them. Sometimes a person can be held responsible for something they didn't do if the action omitted fell under their domain of responsibility.

To figure out how to make something happen

In this case we need to zero in on a factor or factors that will push the event forward. Such a factor is sometimes called a **precipitating cause**. The success of this push will depend on circumstances being right for it, so we will likely also need to describe the **conditions** that have to be in place for the precipitating cause to actually precipitate the event. If there are likely factors that could block the event, we need to show that those can be eliminated. For example, if we propose a particular surgery to fix a heart problem, we will also need to show that the patient can get to a hospital that performs the surgery and get an appointment. We will certainly need to show that the patient is likely to tolerate the surgery.

To stop something from happening

In this case, we do not need to describe all possible causes. We want to find a factor that is so necessary to the bad result that

if we get rid of that factor, the result cannot occur. Then if we eliminate that factor, we can block the bad result. If we cannot find a single such factor, we may at least be able to find one that will make the bad result less likely. For example, to reduce wildfire risk in California, we cannot get rid of all fire whatsoever, but we can repair power lines and aging gas and electric infrastructure to reduce the risk that defects in this system will spark a fire. Or we could try to reduce the damage fires cause by focusing on clearing underbrush.

To predict what might happen in future

As Jeanne Fahnestock and Marie Secor put it in *A Rhetoric of Argument*, "When you argue for a prediction, you try to convince your reader that all the causes needed to bring about an event are in place or will fall into place." You also may need to show that nothing will intervene to block the event from happening. One common way to support a prediction is by comparing it to a past event that has already played out. For example, we might argue that humans have survived natural disasters in the past, so we will survive the effects of climate change as well. As Fahnestock and Secor point out, however, "the argument is only as good as the analogy, which sometimes must itself be supported." How comparable are the disasters of the past to the likely effects of climate change? The argument would need to describe both past and possible future events and convince us that they are similar in severity.

Techniques and cautions for causal argument

So how does a writer make a case that one thing causes another? The briefest answer is that the writer needs to convince us that the factor and the event are correlated and also that there is some way in which the factor could plausibly lead to the event. Then the writer will need to convince us that they have done due diligence in considering and eliminating alternate possibilities for the cause and alternate explanations for any correlation between the factor and the event.

Identify possible causes

If other writers have already identified possible causes, an argument simply needs to refer back to those and add in any that have been missed. If not, the writer can put themselves in the role of detective and imagine what might have caused the event.

Determine which factor is most correlated with the event

If we think that a factor may commonly cause an event, the first question to ask is whether they go together. If we are looking for a sole cause, we can ask if the factor is always there when the event happens and always absent when the event doesn't happen. Do the factor and the event follow the same trends? The following methods of arguing for causality were developed by philosopher John Stuart Mill, and are often referred to as "Mill's methods."

- If the event is repeated and every time it happens, a **common factor** is present, that common factor may be the cause.
- If there is a **single difference** between cases where the event takes place and cases where it doesn't.
- If an event and a possible cause are repeated over and over and they happen to varying degrees, we can check whether they always increase and decrease together. This is often best done with a graph so we can visually check whether the lines follow the same pattern.
- Finally, ruling out other possible causes can support a case that the one remaining possible cause did in fact operate.

Explain how that factor could have caused the event

In order to believe that one thing caused another, we usually need to have some idea of how the first thing could cause the second. If we cannot imagine how one would cause another, why should we find it plausible? Any argument about **agency**, or the way in which one thing caused another, depends on assumptions about what makes things happen. If we are talking about human behavior, then we are looking for motivation: love, hate, envy, greed, desire for power, etc. If we are talking about a physical event, then we need to look at physical forces. Scientists have dedicated much research to establishing how carbon dioxide in the atmosphere could effectively trap heat and warm the planet.

If there is enough other evidence to show that one thing caused another but the way it happened is still unknown, the argument can note that and perhaps point toward further studies that would establish the mechanism. The writer may want to qualify their argument with "may" or "might" or "seems to indicate," if they cannot explain how the supposed cause led to the effect.

Eliminate alternate explanations

The catchphrase "**correlation is not causation**" can help us to remember the dangers of the methods above. It's usually easy to show that two things happen at the same time or in the same pattern, but hard to show that one actually causes another. Correlation can be a good reason to investigate whether something is the cause, and it can provide some evidence of causality, but it is not proof. Sometimes two unrelated things may be correlated, like the number of women in Congress and the price of milk. We can imagine that both might follow an upward trend, one because of the increasing equality of women in society and the other because of inflation. Describing a plausible agency, or way in which one thing led to another, can help show that the correlation is not random. If we find a strong correlation, we can imagine various causal arguments that would explain it and argue that the one we support has the most plausible agency.

Sometimes things vary together because there is a common cause that affects both of them. An argument can explore possible third factors that may have led to both events. For example, students who go to elite colleges tend to make more money than students who go to less elite colleges. Did the elite colleges make the difference? Or are both the college choice and the later earnings due to a third cause, such as family connections? In his book *Food Rules: An Eater's Manual*, journalist Michael Pollan assesses studies on the effects of supplements like multivitamins and concludes that people who take supplements are also those who have better diet and exercise habits, and that the supplements themselves have no effect on health. He advises, "Be the kind of person who takes supplements -- then skip the supplements."

If we have two phenomena that are correlated and happen at the same time, it's worth considering whether the second phenomenon could actually have caused the first rather than the other way around. For example, if we find that gun violence and violence within video games are both on the rise, we shouldn't leap to blame video games for the increase in shootings. It may be that people who play video games are being influenced by violence in the games and becoming more likely to go out and shoot people in real life. But could it also be that as gun violence increases in society for other reasons, such violence is a bigger part of people's consciousness, leading video game makers and gamers to incorporate more violence in their games? It might be that causality operates in both directions, creating a feedback loop as we discussed above.

Proving causality is tricky, and often even rigorous academic studies can do little more than suggest that causality is probable or possible. There are a host of laboratory and statistical methods for testing causality. The gold standard for an experiment to determine a cause is a double-blind, randomized control trial in which there are two groups of people randomly assigned. One group gets the drug being studied and one group gets the placebo, but neither the participants nor the researchers know which is which. This kind of study eliminates the effect of unconscious suggestion, but it is often not possible for ethical and logistical reasons.

The ins and outs of causal arguments are worth studying in a statistics course or a philosophy course, but even without such a course we can do a better job of assessing causes if we develop the habit of looking for alternate explanations.

Sample annotated causal argument

The article "Climate Explained: Why Carbon Dioxide Has Such Outsized Influence on Earth's Climate" by Jason West, published in *The Conversation*, can serve as an example. Annotations point out how the author uses several causal argument strategies.

- [Sample causal essay "Climate Explained: Why Carbon Dioxide Has Such Outsized Influence on Earth's Climate" in PDF version with margin notes](#)
- [Sample causal essay "Climate Explained: Why Carbon Dioxide Has Such Outsized Influence on Earth's Climate" accessible version with notes in parentheses](#)

Practice Exercise 7.5.1

Reflect on the following to construct a causal argument. What would be the best intervention to introduce in society to reduce the rate of violent crime? Below are some possible causes of violent crime. Choose one and describe how it could lead to violent crime. Then think of a way to intervene in that process to stop it. What method from among those described in this section would you use to convince someone that your intervention would work to lower rates of violent crime? Make up an argument using your chosen method and the kind of evidence, either anecdotal or statistical, you would find convincing.

Possible causes of violent crime:

- Homophobia and transphobia
- PTSD
- Testosterone
- Child abuse
- Violence in the media
- Role models who exhibit toxic masculinity
- Depression
- Violent video games
- Systemic racism
- Lack of education on expressing emotions
- Unemployment
- Not enough law enforcement
- Economic inequality
- The availability of guns

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7.6: Proposal Arguments

Media Alternative

Listen to an audio version of this page (3 min, 55 sec):

Proposal arguments attempt to push for action of some kind. They answer the question "What should be done about it?"

In order to build up to a proposal, an argument needs to incorporate elements of definition argument, evaluation argument, and causal argument. First, we will need to define a problem or a situation that calls for action. Then we need to make an evaluation argument to convince readers that the problem is bad enough to be worth addressing. This will create a sense of urgency within the argument and inspire the audience to seek and adopt proposed action. In most cases, it will need to make causal arguments about the roots of the problem and the good effects of the proposed solution.

Below are some elements of proposal arguments. Together, these elements can help us create a sense of urgency about the need for action and confidence in your proposal as a solution.

Common elements of proposal arguments

Background on the problem, opportunity, or situation

Often just after the introduction, the background section discusses what has brought about the need for the proposal—what problem, what opportunity exists for improving things, what the basic situation is. For example, management of a chain of daycare centers may need to ensure that all employees know CPR because of new state mandates requiring it, or an owner of pine timberland in eastern Oregon may want to make sure the land can produce saleable timber without destroying the environment.

While the named audience of the proposal may know the problem very well, writing the background section is useful in demonstrating our particular view of the problem. If we cannot assume readers know the problem, we will need to spend more time convincing them that the problem or opportunity exists and that it should be addressed. For a larger audience not familiar with the problem, this section can give detailed context.

Description of the proposed solution

Here we define the nature of what we are proposing so readers can see what is involved in the proposed action. For example, if we write an essay proposing to donate food scraps from restaurants to pig farms, we will need to define what will be considered food scraps. In another example, if we argue that organic produce is inherently healthier for consumers than non-organic produce, and we propose governmental subsidies to reduce the cost of organic produce, we will need to define “organic” and describe how much the government subsidies will be and which products or consumers will be eligible. See [7.2: Definition Arguments](#) for strategies that can help us elaborate on our proposed solution so readers can envision it clearly.

Methods

If we have not already covered the proposal's methods in the description, we may want to add this. How will we go about completing the proposed work? For example, in the above example about food scraps, we would want to describe and how the leftover food will be stored and delivered to the pig farms. Describing the methods shows the audience we have a sound, thoughtful approach to the project. It serves to demonstrate that we have the knowledge of the field to complete the project.

Feasibility of the project

A proposal argument needs to convince readers that the project can actually be accomplished. How can enough time, money, and will be found to make it happen? Have similar proposals been carried out successfully in the past? For example, we might

observe that according to the U.S. Environmental Protection Agency, Rutgers University runs a program that sends a ton of food scraps a day from its dining halls to a local farm.¹ If we describe how other efforts overcame obstacles, we will persuade readers that if they can succeed, this proposal can as well.

Benefits of the proposal

Most proposals discuss the advantages or benefits that will come from the solution proposed. Describing the benefits helps you win the audience to your side, so readers become more invested in adopting your proposed solution. In the food scraps example, we might emphasize that the Rutgers program, rather than costing more, led to \$100,000 a year in savings because the dining halls no longer needed to pay to have the food scraps hauled away. We could calculate the predicted savings for our new proposed program as well.

In order to predict the positive effects of the proposal and show how implementing it will lead to good results, we will want to use causal arguments. The strategies in [7.5: Causal Arguments](#) will be helpful here. This is a good time to refer back to the problem we identified early in the essay and show how the proposal will resolve that original problem.

Sample annotated proposal argument

The sample essay "Why We Should Open Our Borders" by student Laurent Wenjun Jiang can serve as an example. Annotations point out how Jiang uses several proposal argument strategies.

- [Sample proposal essay "Why We Should Open Our Borders" in PDF with margin notes](#)
- [Sample proposal essay "Why We Should Open Our Borders" accessible version with notes in parentheses](#)

Practice Exercise 7.6.1

Find a proposal argument that you strongly support. Browse news and opinion websites, or try [The Conversation](#). Once you have chosen a proposal, read it closely and look for the elements discussed in this section. Do you find enough discussion of the background, methods, feasibility, and benefits of the proposal? Discuss at least one way in which you think the proposal could be revised to be even more convincing.

Works Cited

¹ "Fact Sheet About the Food Scraps Diversion Program at Rutgers University." *Environmental Protection Agency, U.S.* October 2009, <https://www.epa.gov/sustainable-managers-university>. Accessed 12/10/2021.

Attributions

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7.7: Tips for Paraphrasing and Quoting

Media Alternative

Listen to an audio version of this page (15 min, 22 sec):

We have seen that paragraphs need supporting sentences, but how specifically can we bring in quotations and paraphrases of other sources into our own essay?

Listen to your sources

Have you ever had the maddening experience of arguing with someone who twisted your words to make it seem like you were saying something you weren't? Novice writers sometimes inadvertently misrepresent their sources when they quote very minor points from an article or even positions that the authors of an article disagree with. It often happens when students approach their sources with the goal of finding snippets that align with their own opinion. For example, the passage above contains the phrase "measuring teachers' performance by student test scores is the best way to improve education." An inexperienced writer might include that quote in a paper without making it clear that the author(s) of the source actually dispute that very claim. Doing so is not intentionally fraudulent, but it reveals that the paper-writer isn't really thinking about and responding to claims and arguments made by others. In that way, it harms his or her credibility.

Academic journal articles are especially likely to be misrepresented by student writers because their literature review sections often summarize a number of contrasting viewpoints. For example, sociologists Jennifer C. Lee and Jeremy Staff wrote a paper in which they note that high-schoolers who spend more hours at a job are more likely to drop out of school.¹ However, Lee and Staff's analysis finds that working more hours doesn't actually make a student more likely to drop out. Instead, the students who express less interest in school are both more likely to work a lot of hours *and* more likely to drop out. In short, Lee and Staff argue that disaffection with school causes students to drop-out, not working at a job. In reviewing prior research about the impact of work on dropping out, Lee and Staff write "Paid work, especially when it is considered intensive, reduces grade point averages, time spent on homework, educational aspirations, and the likelihood of completing high school"². If you included that quote without explaining how it fits into Lee and Staff's actual argument, you would be misrepresenting that source.

Provide context

Another error beginners often make is to drop in a quote without any context. If you simply quote, "Students begin preschool with a set of self-regulation skills that are a product of their genetic inheritance and their family environment" (Willingham, 2011, p.24), your reader is left wondering who Willingham is, why he or she is included here, and where this statement fits into his or her larger work. The whole point of incorporating sources is to situate your own insights in the conversation. As part of that, you should provide some kind of context the first time you use that source. Some examples:

- Willingham, a cognitive scientist, claims that ...
- Research in cognitive science has found that ... (Willingham, 2011).
- Willingham argues that "Students begin preschool with a set of self-regulation skills that are a product of their genetic inheritance and their family environment" (Willingham, 2011, 24). Drawing on findings in cognitive science, he explains "..."

As the first example above shows, providing a context doesn't mean writing a brief biography of every author in your bibliography—it just means including some signal about why that source is included in your text.

Quoted material that does not fit into the flow of the text baffles the reader even more. For example, a novice student might write,

Schools and parents shouldn't set limits on how much teenagers are allowed to work at jobs. "We conclude that

intensive work does not affect the likelihood of high school dropout among youths who have a high propensity to spend long hours on the job” (Lee and Staff, 2007, p. 171). Teens should be trusted to learn how to manage their time.

The reader is thinking, who is this sudden, ghostly “we”? Why should this source be believed? If you find that passages with quotes in your draft are awkward to read out loud, that’s a sign that you need to contextualize the quote more effectively. Here’s a version that puts the quote in context:

Schools and parents shouldn’t set limits on how much teenagers are allowed to work at jobs. Lee and Staff’s carefully designed study found that “intensive work does not affect the likelihood of high school dropout among youths who have a high propensity to spend long hours on the job” (2007, p. 171). Teens should be trusted to learn how to manage their time.

In this latter example, it’s now clear that Lee and Staff are scholars and that their empirical study is being used as evidence for this argumentative point. Using a source in this way invites the reader to check out Lee and Staff’s work for themselves if they doubt this claim.

Many writing instructors encourage their students to contextualize their use of sources by making a “[quotation sandwich](#)”; that is, introduce the quote in some way and then follow it up with your own words. If you’ve made a bad habit of dropping in unintroduced quotes, the quotation sandwich idea may help you improve your skills, but in general you don’t need to approach every quote or paraphrase as a three-part structure to have well-integrated sources. You should, however, avoid ending a paragraph with a quotation. If you’re struggling to figure out what to write after a quote or close paraphrase, it may be that you haven’t yet figured out what role the quote is playing in your own analysis. If that happens to you a lot, try writing the whole first draft in your own words and then incorporate material from sources as you revise with “They Say/I Say” in mind.

Use sources efficiently

Some student writers are in a rut of only quoting whole sentences. Some others, like myself as a student, get overly enamored of extended block quotes and the scholarly look they give to the page.⁷ These aren’t the worst sins of academic writing, but they get in the way of one of the key principles of writing with sources: shaping quotes and paraphrases efficiently. Efficiency follows from the second principle, because when you fully incorporate sources into your own explicit argument, you zero in on the phrases, passages, and ideas that are relevant to your points. It’s a very good sign for your paper when most quotes are short (key terms, phrases, or parts of sentences) and the longer quotes (whole sentences and passages) are clearly justified by the discussion in which they’re embedded. Every bit of every quote should feel indispensable to the paper. An overabundance of long quotes usually means that your own argument is undeveloped. The most incandescent quotes will not hide that fact from your professor.

Also, some student writers forget that quoting is not the only way to incorporate sources. [Paraphrasing](#) and summarizing are sophisticated skills that are often more appropriate to use than direct quoting. The first two paragraphs of the example passage above do not include any quotations, even though they are both clearly focused on presenting the work of others. Student writers may avoid paraphrasing out of fear of plagiarizing, and it’s true that a poorly executed paraphrase will make it seem like the student writer is fraudulently claiming the wordsmithing work of others as his or her own. Sticking to direct quotes seems safer. However, it is worth your time to master [paraphrasing](#) because it often helps you be more clear and concise, drawing out only those elements that are relevant to the thread of your analysis.

For example, here’s a passage from a hypothetical paper with a block quote that is fully relevant to the argument but, nevertheless, inefficient:

Drawing on a lifetime of research, Kahneman concludes our brains are prone to error:

System 1 registers the cognitive ease with which it processes information, but it does not generate a warning signal when it becomes unreliable. Intuitive answers come to mind quickly and confidently, whether they originate from skills or from heuristics. There is no simple way for System 2 to distinguish between a skilled and a heuristic response. Its only recourse is to slow down and attempt to construct an answer on its own, which it is reluctant to do because it is indolent. Many suggestions of System 1 are casually endorsed with minimal checking, as in the bat-and-ball problem.

While people can get better at recognizing and avoiding these errors, Kahneman suggests, the more robust solutions involve developing procedures within organizations to promote careful, effortful thinking in making important decisions and judgments.

Even a passage that is important to reference and is well contextualized in the flow of the paper will be inefficient if it introduces terms and ideas that aren't central to the analysis within the paper. Imagine, for example, that other parts of this hypothetical paper use Kahneman's other terms for System 1 (fast thinking) and System 2 (slow thinking); the sudden encounter of "System 1" and "System 2" would be confusing and tedious for your reader. Similarly, the terms "heuristics" and "bat-and-ball problem" might be unfamiliar to your reader. Their presence in the block quote just muddies the waters. In this case, a paraphrase is a much better choice. Here's an example passage that uses a paraphrase to establish the same points more clearly and efficiently:

Drawing on a lifetime of research, Kahneman summarizes that our brains are prone to error because they necessarily rely on cognitive shortcuts that may or may not yield valid judgments.⁴ We have the capacity to stop and examine our assumptions, Kahneman points out, but we often want to avoid that hard work. As a result, we tend to accept our quick, intuitive responses. While people can get better at recognizing and avoiding these errors, Kahneman suggests that the more robust solutions involve developing procedures within organizations to promote careful, effortful thinking in making important decisions and judgments.

Not only is the paraphrased version shorter (97 words versus 151), it is clearer and more efficient because it highlights the key ideas, avoiding specific terms and examples that aren't used in the rest of the paper. If other parts of your paper did refer to Kahneman's System 1 and System 2, then you might choose to include some quoted phrases to make use of some of Kahneman's great language. Perhaps something like this:

Drawing on a lifetime of research, Kahneman summarizes that our brains are prone to error because they necessarily rely on cognitive shortcuts that may or may not yield valid judgments.⁵ System 1, Kahneman explains, "does not generate a warning signal when it becomes unreliable."⁶ System 2 can stop and examine these assumptions, but it usually wants to avoid that hard work. As a result, our quick, intuitive responses are "casually endorsed with minimal checking."⁷ While people can get better at recognizing and avoiding these errors, Kahneman suggests, the more robust solutions involve developing procedures within organizations to promote careful, effortful thinking in making important decisions and judgments.

Whether you choose a long quote, short quote, paraphrase or summary depends on the role that the source is playing in your analysis. The trick is to make deliberate, thoughtful decisions about how to incorporate ideas and words from others.

Paraphrasing, summarizing, and the mechanical conventions of quoting take a lot of practice to master. Numerous other resources (like those listed at the end of this chapter) explain these practices clearly and succinctly. Bookmark some good sources and refer to them as needed. If you suspect that you're in a quoting rut, try out some new ways of incorporating sources.

Choose precise signal phrases

It's time to get beyond the all-purpose "says." And please don't look up "says" in the thesaurus and substitute verbs like "proclaim" (unless there was actually a proclamation) or "pronounce" (unless there was actually a pronouncement). Here's a list of 15 useful alternatives:

- Claims
- Asserts
- Relates
- Recounts
- Complains
- Reasons
- Proposes
- Suggests (if the author is speculating or hypothesizing)
- Contests (disagrees)
- Concludes
- Shows
- Argues
- Explains
- Indicates
- Points out
- Offers

More precise choices like these carry a lot more information than “says”, enabling you to relate more with fewer words. For one thing, they can quickly convey what kind of idea you’re citing: a speculative one (“postulates”)? A conclusive one (“determines”)? A controversial one (“counters”)? You can further show how you’re incorporating these sources into your own narrative. For example, if you write that an author “claims” something, you’re presenting yourself as fairly neutral about that claim. If you instead write that the author “shows” something, then you signal to your reader that you find that evidence more convincing. “Suggests” on the other hand is a much weaker endorsement.

¹[Jennifer C. Lee, J.C. and Jeremy Staff, “When Work Matters: The Varying Impact of Work Intensity on High School Drop Out,” *Sociology of Education* 80, no. 2 \(2007\): 158-178.](#)

²[Ibid.](#), 159.

³ It took me a long time to stop abusing block quotes. They made me feel like my paper was an unassailable fortress of citation! With the friendly but pointed feedback of my professors, I gradually came to see how they took too much space away from my own argument.

⁴[Kahneman, *Thinking, Fast and Slow*, 416-7.](#)

⁵[Ibid.](#)

⁶[Ibid.](#)

⁷[Ibid.](#), 416.

⁸[Ibid.](#), 417.

⁹[Robert B. Marks, *The Origins of the Modern World: A Global and Ecological Narrative from the Fifteenth to the Twenty-first Century* \(Lanham, MD: Rowman & Littlefield, 2007\), 95.](#)

Practice Exercise 7.7.1

Review one of your own essays to examine areas where you have paraphrased or quoted an outside source. Circle any verbs of attribution, and decide if an alternative would help the reader see the author’s purpose or approach more precisely.

Practice Exercise 7.7.2

Read the sample paragraph below from a student paper. Working alone or with a classmate, revise the paragraph to remove the clunky and unnecessary block quote. Use the main idea in the topic sentence to make a deliberate, thoughtful decision as to which chunks of quote to use.

Visiting a doctor is often the first step to diagnosing a serious illness, but some people delay seeing a physician because of rising healthcare costs. In the article “Does forgetting a name or word mean that I have dementia?” by Laurie Archbald-Pannone, it states,

First, it is important to know that dementia cannot be diagnosed from afar or by someone who is not a doctor. A person needs a detailed doctor’s exam for a diagnosis. Sometimes, brain imaging is required. And, forgetting an occasional word – or even where you put your keys – does not mean a person has dementia. There are different types of memory loss and they can have different causes, such as other medical conditions, falls or even medication, including herbals, supplements and anything over-the-counter.

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7.8: Conclusions

Media Alternative

Listen to an audio version of this page (9 min, 28 sec):

Strong conclusions do two things: they bring the argument to a satisfying close and they explain some of the most important implications. You've probably been taught to re-state your thesis using different words, and it is true that your reader will likely appreciate a brief summary of your overall argument: say, two or three sentences for papers less than 20 pages. It's perfectly fine to use what they call "[metadiscourse](#)" in this summary; metadiscourse is text like, "I have argued that ..." or "This analysis reveals that" Go ahead and use language like that if it seems useful to signal that you're restating the main points of your argument. In shorter papers you can usually simply reiterate the main point without that metadiscourse: for example, "What began as a protest about pollution turned into a movement for civil rights." If that's the crux of the argument, your reader will recognize a summary like that. Most of the student papers I see close the argument effectively in the concluding paragraph.

The second task of a conclusion—situating the argument within broader implications—is a lot trickier. A lot of instructors describe it as the "[So what?](#)" challenge. You've proven your point about the role of agriculture in deepening the Great Depression; so what? I don't like the "so what" phrasing because putting writers on the defensive seems more likely to inhibit the flow of ideas than to draw them out. Instead, I suggest you imagine a friendly reader thinking, "OK, you've convinced me of your argument. I'm interested to know what you make of this conclusion. What is or should be different now that your thesis is proven?" In that sense, your reader is asking you to take your analysis one step further. That's why a good conclusion is challenging to write. You're not just coasting over the finish line.

So, how do you do that? A thesis can situate an arguable claim within broader implications. If you've already articulated a thesis statement that does that, then you've already mapped the terrain of the conclusion. Your task then is to explain the implications you mentioned: if environmental justice really is the new civil rights movement, then how should scholars and/or activists approach it? If agricultural trends really did worsen the Great Depression, what does that mean for agricultural policy today? If your thesis, as written, is a two-story one, then you may want to revisit it after you've developed a conclusion you're satisfied with and consider including the key implication in that thesis statement. Doing so will give your paper even more momentum.

Let's look at the concluding counterparts to the excellent introductions that we've read to illustrate some of the different ways writers can accomplish the two goals of a conclusion:

Victor Seet on religious embodiment:¹

Embodiment is fundamental to bridging reality and spirituality. The concept demonstrates how religious practice synthesizes human experience in reality—mind, body, and environment—to embed a cohesive religious experience that can recreate itself. Although religion is ostensibly focused on an intangible spiritual world, its traditions that eventually achieve spiritual advancement are grounded in reality. The texts, symbols, and rituals integral to religious practice go beyond merely distinguishing one faith from another; they serve to fully absorb individuals in a culture that sustains common experiential knowledge shared by millions. It is important to remember that human senses do not merely act as sponges absorbing external information; our mental models of the world are being constantly refined with new experiences. This fluid process allows individuals to gradually accumulate a wealth of religious multimodal information, making the mental representation hyper-sensitive, which in turn contributes to religious experiences. However, there is an important caveat. Many features of religious visions that are attributed to embodiment can also be explained through less complex cognitive mechanisms. The repetition from religious traditions exercised both physically and mentally, naturally inculcates a greater religious awareness simply through familiarity. Religious experiences are therefore not necessarily caused by embedded cues within the environment but arise from an imbued fluency with religious themes. Embodiment proposes a connection between body, mind, and the environment that attempts to explain how spiritual transcendence is achieved through physical reality. Although embodied cognition assuages the conflict between science and religion, it remains to be seen if this intricate scientific theory is able to endure throughout millennia just as religious beliefs have.

The paragraph first re-caps the argument, then explains how embodiment relates to other aspects of religious experience, and finally situates the analysis within the broader relationship between religion and science.

From Davis O'Connell:²

Looking at Abelard through the modern historical lens, it appears to many historians that he did not fit the 12th-century definition of a heretic in the sense that his teachings did not differ much from that of the church. Mews observes that Abelard's conception of the Trinity was a continuation of what earlier Christian leaders had already begun to ponder. He writes: "In identifying the Son and Holy Spirit with the wisdom and benignity of God, Abelard was simply extending an idea (based on Augustine) that had previously been raised by William of Champeaux." St. Augustine was seen as one of the main Christian authorities during the Middle Ages and for Abelard to derive his teachings from that source enhances his credibility. This would indicate that although Abelard was not necessarily a heretic by the church's official definition, he was branded as one through all of the nontheological social and political connotations that "heresy" had come to encompass.

O'Connell, interestingly, chooses a scholarly tone for the conclusion, in contrast to the more jocular tone we saw in the introduction. He doesn't specifically re-cap the argument about Abelard's deviance from social norms and political pressures, but rather he explains his summative point about what it means to be a heretic. In this case, the implications of the argument are all about Abelard. There aren't any grand statements about religion and society, the craft of historiography, or the politics of language. Still, the reader is not left hanging. One doesn't need to make far-reaching statements to successfully conclude a paper.

From Logan Skelly:³

Considering the hundreds of millions of years that *S. aureus* has been evolving and adapting to hostile environments, it is likely that the past seventy years of human antibiotic usage represents little more than a minor nuisance to these bacteria. Antibiotic resistance for humans, however, contributes to worldwide health, economic, and environmental problems. Multi-drug resistant *S. aureus* has proven itself to be a versatile and persistent pathogen that will likely continue to evolve as long as selective pressures, such as antibiotics, are introduced into the environment. While the problems associated with *S. aureus* have received ample attention in the scientific literature, there has been little resolution of the problems this pathogen poses. If these problems are to be resolved, it is essential that infection control measures and effective treatment strategies be developed, adopted, and implemented in the future on a worldwide scale—so that the evolution of this pathogen's virulence can be curtailed and its pathogenicity can be controlled.

Skelly's thesis is about the need to regulate antibiotic usage to mitigate antibiotic resistance. The concluding paragraph characterizes the pathogens evolutionary history (without re-capping the specifics) and then calls for an informed, well planned, and comprehensive response.

All three conclusions above achieve both tasks—closing the argument and addressing the implications—but the authors have placed a different emphasis on the two tasks and framed the broader implications in different ways. Writing, like any craft, challenges the creator to make these kinds of independent choices. There isn't a standard recipe for a good conclusion.

¹ This example is slightly adapted from a student-authored essay: [Victor Seet, "Embodiment in Religion," Discoveries, 11](#) (2012). Discoveries is an annual publication of the Knight Institute for Writing in the Disciplines of Cornell University which publishes excellent papers written by Cornell undergraduates.

² [Davis O'Connell, "Abelard: A Heretic of a Different Nature," Discoveries 10](#) (2011): 36-41.

³ [Logan Skelly, "Staphylococcus aureus: The Evolution of a Persistent Pathogen," Discoveries 10](#) (2011): 89-102.

Practice exercise

1. Choose one of the [suggested short essays presented in this book](#). Read the whole essay and reflect in your discussion post on the conclusion:
 - a) Which words did it use to repeat the thesis and other main ideas? Did it contain too much or too little summary of these for your taste?
 - b) How did it answer the "So what?" question and described some meaningful implications of the essay's main ideas? Do you think it could have added or clarified anything to increase its impact on the reader?

2. Choose an essay you have written in this or another class and rewrite the conclusion to improve it according to the principles in this section. Write an additional paragraph of reflection on how the new conclusion would make a stronger impression on readers and better serve your purpose in the essay.

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8: HOW ARGUMENTS APPEAL TO EMOTION

8.1: The Place of Emotion in Argument

8.2: Word Choice and Connotation

8.3: Powerful Examples

8.4: Tone

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8.6: Fitting the Emotions to the Audience

8.7: Legitimate and Illegitimate Emotional Appeals

8.1: The Place of Emotion in Argument

Media Alternative

Listen to an audio version of this page (5 min):

We have spent the bulk of this book analyzing arguments' logical structure. We have mapped out arguments and assessed their reasoning, evidence, and assumptions without referring to our feelings about them. And yet we all know that arguments are not won and lost solely on the merits of the ideas. Humans are not robots. As Jeanne Fahnestock and Marie Secor put it in *A Rhetoric of Argument*, emotions are "powerful incentives to belief and action." Philosophers and laypeople have long asked what role emotions should have in shaping our ideas. Is it right for arguments to appeal to emotion, or is it a cheap trick? Should we guard against feeling what an argument asks us to feel? Or should we let emotions play a role in helping us decide whether we agree or not?



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In one oversimplified view, logic is a good way to decide things and listening to emotions is a bad way. We might make this assumption if we tell ourselves or others, "Stop and think. You're getting too emotional." According to this view, no one reasons well under the influence of emotion. Pure ideas are king, and feelings only distort them.

Of course, sometimes emotions do lead us astray. But emotions and logic can work together. Consider Dr. Martin Luther King's "I have a dream" speech. Was it illegitimate for him to ask listeners to feel deeply moved to support racial equality? He famously proclaimed, "I have a dream that my four little children will one day live in a nation where they will not be judged by the color of their skin, but by the content of their character." Should listeners have guarded themselves against feeling sympathy for those four children? If we care about things that matter and an argument is about something that matters, then we will and should have feelings about it. King intertwines his logical argument against racism with an appeal to our empathy, tenderness, and sense of justice.

Not all arguments are as intense as that one. Many, such as scientific journal articles, are calm and dispassionate. But all arguments must call on emotion, broadly defined, because they must motivate readers to stay engaged. Even a captive audience could potentially tune out. Every argument needs a reason to exist, a reason why it is important or relevant or just worth reading. It needs to keep us interested, or, failing that, to keep us convinced that reading on will be worthwhile. This reason to exist is sometimes called **exigence**. An argument can create exigence and motivate readers in many ways, but all these ways depend on emotion.

Besides the basic human emotions we might recognize on a toddler's face--anger, joy, sadness, fear, disgust, desire, and

surprise--each one with many options for levels of intensity, there are others that we don't always think of as emotion. If we appeal to readers' self-interest, we play on fear and hope and desire for emotional, physical and economic wellbeing. Another kind of emotion is the desire for belonging, for a sense of being seen and validated. We feel pride in a group or sense of identity or social status, so references to that shared identity or status appeal to this sense of belonging. Our motivation to uphold our most precious values is bound up in deep feeling.

Another form of emotion present in the most seemingly objective arguments is curiosity. This is often combined with an appeal to a sense of pride in our intellectual capacity. Academic journal articles and popular newspaper and magazine articles and nonfiction books must all appeal to readers' curiosity about the world and its workings and surprises to encourage them to keep reading. An argument may implicitly invite us to enjoy learning and discovery. It can offer a sense of relief, comfort, and pleasure in ideas laid out clearly in an ordered fashion.



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Arguments can call on emotions in support of claims, but they can also make shaping readers' emotions their primary purpose. An argument may set out to define or change how a reader feels about something. Or, it may set out to reinforce emotions and amplify them. A eulogy, for example, is a speech that praises a person who has passed away, a person usually already known to the audience. It serves to help people feel more intensely what they already believe about the value of the person's life.

In this chapter, we will explore how writers use examples, word choice, and tone to affect readers' feelings. We will look at how writers can vary their emotional appeals in the course of an argument and adapt them to specific audiences. Finally, we will consider how to distinguish between legitimate and illegitimate emotional appeals, between those that fit the logic of the argument and those that stray from it.

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8.2: Word Choice and Connotation

Media Alternative

Listen to an audio version of this page (6 min, 6 sec):

In previous chapters, we considered argument in terms of logic. We have asked ourselves if claims, reasons, and assumptions are correct in what they assert. Now we will look at how writers choose words not only to convey ideas but to shape readers' emotional experience and subconscious reactions.



The dreamy, glowing colored sparkles around the word "dream" express the sense of wonder and vague possibility associated with the word.

Photo by [Sharon McCutcheon](#) on [Unsplash](#) under the [Unsplash License](#).

Connotation refers to the emotions, social and cultural implications, and related concepts that most people associate with a word. Some connotations are obvious: anyone would prefer be called “assertive” rather than “pushy” for demanding something they consider to be their right. Other connotations are more subtle. Consider the difference between the feelings associated with the words “change” and “transform.” “Transform” has connotations of visionary change for the better. If we hear that “the new college president has transformed the admissions process” we are more likely to feel hopeful, perhaps impressed, without knowing anything at all about the nature of the changes. If we hear simply that “the new college president has changed the admissions process,” we will probably feel more skeptical about these changes and what their positive and negative impacts may be.

Consider what different feelings about journalists come across in the following two sentences:

- The media were swarming around the pileup on the expressway to capture every conceivable injury for the evening news.
- The journalists were on the scene at the expressway crash to document the incident for the evening news.

The first sentence gives us a sense of media reporting that is inappropriately aggressive through the words “swarm” and “capture.” In the second sentence, on the other hand, “were on the scene” and “document” imply that the journalists are neutral, diligent, and professional.

If something in an argument is likely to set the reader against the argument, the writer can try to soften that reaction by choosing the most positive words available to fit the meaning. If the writer wants to intensify feelings of outrage, tragedy, or absurdity around a phenomenon that readers might otherwise dismiss as ordinary, the writer will need to think of an unfamiliar and dramatic way to describe that phenomenon.

The [border argument we analyzed in Chapters 2 and 3](#) offers many examples of emotional word choice. In the opening paragraph, the author starts out by referring to “illegal immigration,” acknowledging the familiar, commonly used phrase in the question “Is illegal immigration actually wrong?” However, she quickly shifts to words with gentler connotations when she reframes the question as, “Is it unethical to cross a border without permission?” This is the emotional shift she is encouraging readers to make—away from harsh judgment and toward a clear-eyed understanding. As she expands her exploration of the position of the undocumented in the next paragraph, she describes them in sympathetic terms with the following phrases: “people who are driven by need and good intentions,” “raising children in an impoverished third-world community plagued by violence,” “under desperate circumstances.” The connotations and emotional appeal are very much the same as those in the poem inscribed on the Statue of Liberty, “The New Colossus” by Emma Lazarus, 1883. Lady Liberty talks about immigrants in words full of pathos and hope:

Give me your tired, your poor,
Your huddled masses yearning to breathe free,
The wretched refuse of your teeming shore.
Send these, the homeless, tempest-tost to me,
I lift my lamp beside the golden door!



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Practice Exercise 8.2.1

Write down the connotations of each of the following words used to refer to immigrants:

- undocumented immigrants
- refugees
- asylum-seekers
- Dreamers
- illegal immigrants
- illegal aliens
-

Decide when or if you would use each term in discussions of current U.S. policy.

Practice Exercise 8.2.2

1. Rank the words below from most negative to neutral to most positive. What are the connotations of each one? In what kind of situation would it be appropriate to use each one?
 - riot
 - demonstration
 - protest

- rally
- uprising
- insurrection
- unrest
- march
- revolt
- movement

2. Then, discuss the different feelings and images called up by the following two sentences:
 1. Rioters flooded downtown streets on Monday afternoon.
 2. Protestors marched through the city.
3. Think of a situation in which there were public demonstrations or unrest. Describe what happened, choosing your words to shape readers' feelings and associations.

Practice Exercise 8.2.3

Working in a pair or small group, list the following groups of words from least to most positive, using your knowledge of connotation to guide you. Note where you agree or disagree on a word's connotation. What cultural, socio-economic, or personal factors possibly caused your group's disagreements or lack thereof?

- thin, fit, lanky, skinny, gaunt, slender
- aggressive, assertive, domineering, dynamic, pushy
- shrewd, nerdy, bright, brilliant, cunning, smart, intelligent

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8.3: Powerful Examples

Media Alternative

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Emotional language can certainly affect readers, but even the most fervent appeals to values and sympathies may feel too abstract without examples. To feel connected to an argument, readers need to be able to imagine what it means in some particular case. Writers can bring an example to life by describing a scene, developing a character, or building suspense and ending with a dramatic resolution.

The sample border argument we have referenced invites readers to imagine a hypothetical example where they themselves are desperately seeking to protect a child and bring them into the United States. The argument could well be expanded by adding the story of a real parent and child. One book, *Solito/Solita: Crossing Borders with Youth Refugees from Central America*, edited by Steven Mayers and Jonathan Freedman, dedicates itself to first-person stories of asylum seekers. One of these is “Rosa, a Salvadoran mother fighting to save her life as well as her daughter’s after death squads threatened her family. Together they trekked through the jungles on the border between Guatemala and Mexico, where masked men assaulted them.” Another is “Adrian, from Guatemala City, whose mother was shot to death before his eyes. He refused to join a gang, rode across Mexico atop cargo trains, crossed the US border as a minor, and was handcuffed and thrown into ICE detention on his eighteenth birthday.” The publisher, *Voice of Witness*, sees powerful individual stories as its best tool to affect social change. Its mission statement declares, “Voice of Witness (VOW) advances human rights by amplifying the voices of people impacted by injustice...Our work is driven by the transformative power of the story, and by a strong belief that an understanding of crucial issues is incomplete without deep listening and learning from people who have experienced injustice firsthand.”

Of course, an argument calling for more controls on immigration would choose a wholly different kind of story. The following excerpt from President Trump’s speech accepting the nomination for the presidency in 2016 focuses on a young woman killed by an immigrant: “They are being released by the tens of thousands into our communities with no regard for the impact on public safety or resources. One such border-crosser was released and made his way to Nebraska. There, he ended the life of an innocent young girl named Sarah Root. She was 21 years old, and was killed the day after graduating from college with a 4.0 Grade Point Average. Her killer was then released a second time, and he is now a fugitive from the law. I’ve met Sarah’s beautiful family. But to [the Obama] Administration, their amazing daughter was just one more American life that wasn’t worth protecting. One more child to sacrifice on the altar of open borders.”

Obviously, there are as many stories to choose from as there are immigrants. If a story serves as an illustration of a general point, we have to ask how representative it is. Is it presented as typical? If so, is there evidence to show its **typicality**? Arguments can complement specific examples with statistics to show typicality.

Even if an example represents a common experience, we need to look carefully at how it is used. Does the story promote harmful stereotypes while neglecting accounts that are just as common or more common and that contradict those stereotypes?

Practice Exercise 8.3.1

Review some local headlines on news sites like [NPR](#), [Fox News](#), [ABC](#), or any other news site you frequently visit, and find an article or video that uses a powerful example to illustrate a point. Then, evaluate the powerful example, addressing the following questions:

- What point does the powerful example illustrate?
- What types of emotions does the example play on? How will these emotions affect the reader's opinion on an issue discussed in the piece?
- Is the powerful example presented as typical? If so, is there evidence to show its typicality?
- Does the powerful example promote harmful stereotypes? How so, or why not?

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8.4: Tone

Media Alternative

Listen to an audio version of this page (12 min):

What is tone?

Tone refers to the overall emotional attitude of the argument. We know intuitively what “tone of voice” means when we’re describing a conversation. If we hear a person speaking and ask ourselves the following questions, we will usually be able to describe the tone:

- What emotions do the sound of the voice convey?
- What expression do we see or imagine on the speaker’s face as they make the argument?



This performer conveys confidence, friendliness, and humor through her smile and posture.

Photo by [Loui G.](#) from [Pexels](#) under the [Pexels License](#).

When we read, we lack the visual and auditory clues, but we still intuitively sense the writer’s attitude. Tone comes across through emotional word choice and choice of examples, as we have seen in [8.2: Word Choice and Connotation](#) and [8.3: Powerful Examples](#), but also in other ways, both subtle and overt. These include sentence structure, use of questions, emphasis, and direct declarations of feeling. All of these contribute to an overall pattern.

For example, let’s look at the [border argument we analyzed in Chapters 2 and 3](#). The third paragraph reads as follows:

I don’t have a clear vision yet of what the right border policy would be, and I admit that completely open borders would put our security at risk. But surely there are ways to regulate the border without criminalizing people who are driven by need and good intentions.

In [8.2: Word Choice and Connotation](#), we noted that words like “driven by need” and “good intentions” evoke feelings of compassion and sympathy. In describing the tone, however, we could go further to talk about the writer’s purpose and attitude. Their admissions of uncertainty in the first sentence indicate an attitude of humility and openness, so we could describe the tone as “humble.” In the second sentence, the word “surely” suggests urgency and an appeal to common sense. The contrast between the orderly, neutral phrase “regulate the border” and the more aggressive-sounding “criminalizing people” suggests that one

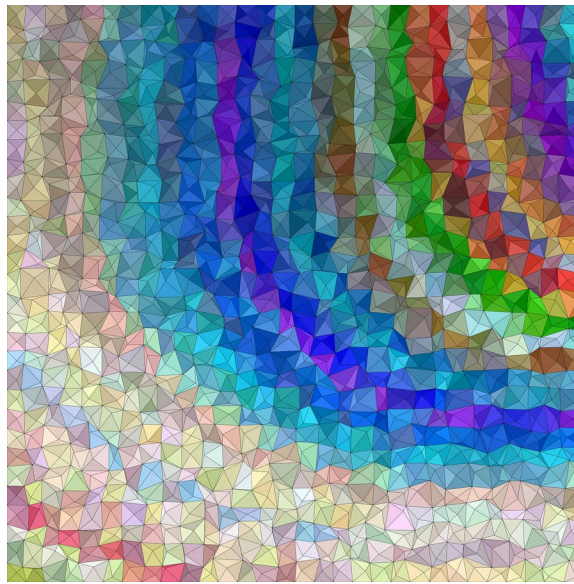
option is decent and the other cruel. The feelings of compassion and sympathy evoked by people's "need" and "good intentions" reinforce the sense of urgency and appeal to decency. The combination of all of this suggests that the writer cares very much about the ethics of what they are discussing because innocent people's wellbeing is at stake. We could describe the tone, then, as "earnest," "urgent," or "impassioned."

How can we identify a writer's tone?

If we want to describe the tone of an argument, we can ask ourselves these general questions:

- How does the writer feel about the topic of the argument?
- How does the writer feel about their own knowledge of the topic?
- What is the writer's attitude toward the reader?

If we are not sure how to answer or we want more insight, we can consider specific aspects of the writer's attitude, such as the degree of respect, seriousness, or certainty they feel. To describe the tone very precisely, we will need to use multiple words. We can ask ourselves about each of the aspects of tone listed in the table below and consider which of the accompanying tone words best describe the argument we are analyzing. Note that words clustered together are in most cases not synonyms. They convey shades of meaning, so they are worth looking up in an online dictionary to confirm their connotations before using them.



Like colors grouped next to similar colors, related tone words may describe similar but slightly different tones. Image by [David Zydd](#) from [Pixabay](#) under the [Pixabay License](#).

Words to describe a writer's tone

Aspect of the writer's attitude	Tone words	Contrasting tone words
Degree of seriousness	conversational, flippant, glib, childish, frivolous, facetious, humorous, sarcastic, comic, satiric, amused, ironic, mocking, irreverent, casual, lighthearted, playful, cheerful, ridiculous, giddy, dreamy	vs. serious, earnest, solemn, grave, intense, impassioned, prayerful, reverent, idealistic

Aspect of the writer's attitude	Tone words	Contrasting tone words
Degree of respect	dismissive, patronizing, condescending, arrogant, haughty, chauvinistic, macho, domineering	vs. humble, respectful, reverent, intimidated, obsequious, submissive, complimentary, flattering, simpering
Degree of formality	irreverent, informal, coarse, vulgar, casual, conversational, improvisational, exploratory	vs. formal, businesslike, professional, professorial, esoteric, clinical
Degree of self-regard	condescending, arrogant, patronizing, proud, majestic, haughty, obnoxious	vs. modest, humble, self-effacing, self-deprecating, down-to-earth
Degree of goodwill toward others	benevolent, kind, loving, affectionate, amiable, genial, agreeable, friendly, jovial, encouraging, warm	vs. mean-spirited, mean, malicious, spiteful, cruel, hateful, hating, vengeful
Degree of anxiety	agitated, excited, sensational, alarmed, nervous, anxious, obsessive, worried, fearful, frightened, paranoid, frantic, frazzled, desperate, dramatic, disturbed, perturbed	vs. calm, tranquil, serene, unworried, contemplative, meditative, reflective, thoughtful
Degree of hesitation	cautious, hesitating, reticent, evasive	vs. bold, audacious, straightforward, direct, outspoken, authoritative
Degree of certainty	conflicted, uncertain, reluctant, contradictory, confused, baffled, ambivalent, uneasy, apologetic, regretful, pensive	vs. confident, sure, definite, unapologetic, righteous, self-righteous, determined, persuasive, hypnotic
Degree of interest in the topic	wondering, curious, inquisitive, fascinated	vs. bored, apathetic, removed, indifferent, wooden, world-weary, dull, bland, banal, blasé
Degree of surprise	unbelieving, incredulous, surprised, innocent, naive, disbelieving	vs. knowing, jaded, nonplussed, weary
Degree of distance	intimate, impassioned, passionate, ardent, personal	vs. formal, impersonal, objective, neutral, journalistic, informative, professional, businesslike, intellectual, detached, numb, distant, disinterested
Degree of openness	open, direct, forthright, candid	vs. secretive, sneaky, cagey, sly

Aspect of the writer's attitude	Tone words	Contrasting tone words
Degree of approval	elated, enthusiastic, ecstatic, celebratory, euphoric, joyous, jubilant, zestful, exuberant, blissful, happy, delighted, awestruck, appreciative, approving	vs. disapproving, disappointed, concerned, alarmed, critical, caustic, appalled
Degree of warmth toward the audience	warm, cordial, friendly, flirtatious, seductive	vs. cold, forbidding, aloof, impersonal
Degree of connection to suffering	concerned, compassionate, tender, consoling, comforting, sympathetic, empathetic	vs. apathetic, indifferent, detached, aloof, callous
Desire to communicate	talkative, eager	vs. laconic, taciturn, reluctant
Pace	abrupt, hurried, hasty	vs. patient, gradual, unhurried, lethargic, languid, pensive, scrupulous
Attitude to the future	despairing, tragic, defeated, discouraged, resigned, overwhelmed, disheartened, dismal, foreboding, dejected, depressed, bitter, bleak, bewildered, pessimistic, distressed, cynical, pathetic, melancholy, nostalgic, saddened, miserable, morbid, morose, mournful, sorrowful, somber, lamenting, grave, grim	vs. hopeful, sanguine, optimistic, content, excited, enthusiastic
Attitude to another's success	envious, jealous	vs. admiring, congratulatory, celebratory, enthusiastic
Attitude to another's failing	critical, annoyed, angry, frustrated, impatient, disappointed, resentful, hurt, aggravated, outraged, appalled, indignant, disgusted, impotent, vindictive, vengeful, furious	vs. forgiving, indulgent, understanding, accepting, tolerant
Attitude to one's own failing	apologetic, remorseful, repentant, disgusted, self-critical	vs. defensive, self-indulgent, complacent
Attitude to powerful forces like spirit, country, religion	patriotic, pious, religious, reverent, mystical, spiritual, obedient	vs. irreverent, scoffing, impious, skeptical



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Phrases for analyzing tone

If the tone is constant

- X takes a _____ tone in this piece.
- X's _____ attitude comes across in phrases like "_____."
- The tone of the argument is _____.
- The _____ tone suggests that _____.
- X's choice of words like "_____" to describe _____ suggests their _____ attitude.
- X's _____ tone reflects their attitude to _____.

If the tone shifts in the course of the argument

- Early on, X adopts a _____ tone, but later they seem more _____.
- Although at first, the tone is _____, X shifts to a more _____ tone when _____.
- X takes a _____ attitude to _____, but when it comes to _____, X is more _____.
- X's _____ tone in the section on _____ contrasts with their more _____ attitude to _____.

Practice Exercise 8.4.1

Write three one-sentence versions of the same argument, each with a different tone. Label each version with a tone word that describes it precisely.

Practice Exercise 8.4.2

Choose an argument you have read recently and describe its tone. Choose a sample sentence from the argument in which the tone comes across clearly and explain which words expressed that tone.

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8.5: Varying the Emotions

Media Alternative

Listen to an audio version of this page (2 min, 22 sec):

As we analyze emotion and tone, we won't always find one description that fits the entirety of the argument. The writer may be shifting tone and emotional appeal in subtle or dramatic ways either to match shifts in the ideas or to create variety. If we think of argument in terms of relationship and intimate conversation, this idea becomes clearer. One style when we talk to another person is to stick with one tone and repeat an emotional appeal over and over. This can be successful in reinforcing the message and perhaps wearing down resistance, but it can also be offputting. It could even seem robotic, unresponsive to the reader's needs. A more flexible, varied tone with moments of greater and lesser intensity can provide contrast and relief and thus seem more sensitive to the audience. Thus, sometimes even in serious, earnest arguments, it can help keep readers from tuning out if the writer lightens the tone or takes a step back.

We think of Shakespearean drama as exalted high culture, but Shakespeare famously wrote scenes of terrible puns, sex jokes, and plenty of slapstick into his most intense tragedies to keep the audience from pelting actors with rotten tomatoes. Similarly, a writer may choose to offer some relief or distraction after an impassioned appeal through a moment of humor or a neutral statement.



Like music, an argument can shift in tone and pacing to engage listeners.
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We can think of variety in emotional appeal as similar to the way music varies in volume and pacing. Sometimes a piece of music keeps the same volume and pace throughout, but more often the composer adds notes to the musician on when to boom or hush, hurry or draw out the notes. Often the music gets faster and louder toward the end, in a crescendo of intensity. This is one traditional way of ending an argument: on what we sometimes call a “ringing note” meant to inspire and fire up readers to agree, remember, or take action.

Practice Exercise 8.5.1

Choose a [Ted talk](#) that includes a transcript, such as Jamila Lysicott’s [“3 ways to speak English.”](#) Watch the talk and then read the transcript, making notes on the tone in the margins. Choose one place where the tone shifts and reflect on why the writer chose to shift there.

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8.6: Fitting the Emotions to the Audience

Media Alternative

Listen to an audio version of this page (3 min, 5 sec):

An argument's success will depend not just on how well the writer expresses emotion but on how well the writer gauges the reader's likely response. Values, cultural beliefs, and life experiences shape our emotional reactions. While some appeals to our feelings, such as the reference to parents' desire to protect their children, may be more universal, others will be more audience specific. Different readers can have opposite emotional reactions to the same sentence. When the writer misjudges readers' values, assumptions or experiences, an emotional appeal may fall flat or may hurt the argument instead of helping. An obvious example is a racist or sexist comment.



The speaker here seems attentive to the emotional reactions of her audience.
Photo by RF_...studio from Pexels under the Pexels License.

In the case of the border argument, the intended audience seems to be Americans who are citizens or legal residents. What if the writer knew more about how the person's life experience might relate to the issue of illegal immigration? For example, how might Anna Mills shape the argument and appeal to emotions differently if she knew the reader was one of the following?

- A person whose parents are undocumented
- A person who waited seven years for a visa to come to the U.S.
- A person who has been raised to be afraid of Mexican immigrants

In the case of the person whose parents are undocumented, the writer might actually spend less time encouraging readers to feel empathy. She could choose not to waste time "preaching to the choir" and instead focus on policy suggestions.

In the case of the person who waited for the visa, she might need to find a way to overcome some resentment against people who came to America without waiting so long.

In the case of the person raised to be afraid of Mexican immigrants, she might focus on specific immigrant stories so the reader would begin to have some vivid, moving stories of real people in their minds rather than racist stereotypes.

Practice Exercise 8.6.1

For each argument, consider how you would persuade the two different audiences without misleading them.

Here's a sample claim: "Police should wear body cameras."

We could write this version for an audience of police: "Body cameras seem unnecessary, and they make moving around more difficult, but hard-working police should relish the opportunity to make their actions viewable. It shows integrity and honesty."

In contrast, Black Lives Matter protesters would likely respond better to the following version: "Body cameras will finally hold police accountable for their cruel, untenable actions against innocent civilians; these cameras will bring us justice!"

1. Argument: We should lower the drinking age to sixteen.
 - a. Young adults who want to party.
 - b. Parents of teenagers.
2. Argument: The U.S. should ban fossil fuels in favor of green renewable energy.
 - a. Coal miners from Kentucky.
 - b. Liberal artists from New York City.

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8.7: Legitimate and Illegitimate Emotional Appeals

Media Alternative

Listen to an audio version of this page (6 min, 58 sec):

We made the case at the beginning of this chapter that emotion is a legitimate part of argument. But there is a reason emotional appeals have a dubious reputation: they are often abused. If a writer knows there is a problem with the logic, they may use an emotional appeal to distract from the problem. Or, a writer may create a problem with the logic, knowingly or unknowingly, because they cannot resist including a particular strong emotional appeal. In Chapter 4, we looked at [fallacies, or problems with arguments' logic](#). Many of the fallacies we have already looked at are so common because the illogical form of the argument makes a powerful appeal. The writer chose the faulty reasoning because they thought it would affect readers emotionally. Arguments that focus on a “red herring,” for example, distract from the real issue to focus on something juicier. A straw man argument offers a distorted version of the other side to make the other side seem frighteningly extreme.

To be legitimate, emotional appeals need to be associated with logical reasoning. Otherwise, they are an unfair tactic. The emotions should be attached to ideas that logically support the argument. Writers are responsible for thinking through their intuitive appeals to emotion to make sure that they are consistent with their claims.



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Emotional appeals should not mislead readers about the true nature or the true gravity of an issue. If an argument uses a mild word to describe something horrific, that means the argument can't connect its emotional appeal to any logical justification. A **euphemism** is a substitute neutral-sounding word used to forestall negative reactions. For example, calling a Nazi concentration camp like Auschwitz a “detention center” would certainly be an unjustifiable euphemism. Given the amount of evidence about what went on at Auschwitz, using the phrase “Death Camp” would be a legitimate emotional appeal.

A more controversial question is what to call the places where people are detained if they are caught trying to cross the U.S. border without permission. An argument calling U.S. Customs and Border Patrol detention centers to “concentration camps” would need to justify its comparison by arguing for significant similarities. Otherwise, critics would claim that the comparison was a cheap shot intended to make people horrified by detention centers without good reason. Even if the argument simply called the centers “camps,” the word would still bring to mind Nazi concentration camps and also the Japanese internment camps created by our own government during World War II. The word “camp,” when referring to a place where people are held against their will, has inevitable overtones of racism and genocide. An argument should only choose a word with connotations that it can stand by and explain.

A question like this about whether an emotional appeal is legitimate or not often is often at the heart of any disagreement or productive discussion of the argument. If we agree that the comparison to concentration camps is legitimate, we will certainly agree that the detention centers, as they are currently organized, should be done away with.

Practice Exercise 8.7.1

Read each argument below and describe the emotional appeal it makes. Do you think this appeal is legitimate or illegitimate in relation to the argument? Why? Do you personally find it compelling?

1. "Please, even if you don't feel sick, you may be transmitting this disease," he said. "Please, please, practice common sense, common decency. Protect yourself, but also protect others. ... What more evidence do we need?"-- [California Governor Gavin Newsom at a press conference, June 26, 2020](#)
2. "Refusing to wear a mask is no more a "personal choice" than is drinking all evening and then stumbling into your car and heading down the road. In a time of plague, shunning a face mask is like driving drunk, putting everyone in your path in danger." -- ["Refusing to wear a mask is like driving drunk" by Nicholas Kristof, New York Times Op-Ed, July 1, 2020](#)
3. "The irony is that these men think they're manifesting the ideal of the rugged, individualistic American, when their refusal [to wear a mask] really traces in part to a fear of what other people will think about them. Drunk on a toxic brew of self-interest and that masculine ideology, they mistake their refusal to protect themselves and others as a mark of character when instead, it's a mark on their characters."-- ["The condoms of the face: why some men refuse to wear masks" by Emily Willingham, Scientific American, June 29, 2020](#)
4. "While mask mandates provide a comfort level that is needed to get people back to work and resume economic activity, they may also induce a false sense of security. In early April, as the Trump administration was debating whether to change its guidance on masks, Deborah Birx of the White House virus task force warned that "we don't want people to get an artificial sense of protection because they're behind a mask" or "send a signal that we think a mask is equivalent" to social distancing and good hygiene...Masks have benefits, but moralism can be harmful to public health." --[Allysia Finley, "The Hidden Danger of Masks," Wall Street Journal, August 4, 2020](#)
5. "'The face-covering directive is the definition of government overreach," said Aaron Withe, national director of the Freedom Foundation, a national public policy organization based in Olympia, Wash. "If people choose to wear a mask, that's their choice. But Inslee is going after otherwise law-abiding citizens when there are rioters destroying Washington cities such as Seattle with no punishment in sight." The Washingtonians represented by the Freedom Foundation argue that by requiring them to wear face masks the state is essentially compelling them to support junk science in violation of their freedom of conscience, which is prohibited by the state constitution." --[Freedom Foundation press release, July 7, 2020](#)
6. "Think of it like the push for condom use during the AIDS epidemic, when public service announcements noted that when you have sex with someone, you're having sex with every person that person has slept with. It's the same idea, though transmission of the coronavirus is far easier. If you're unprotected (mask-less) around someone, you're effectively around anyone that person has been near. You have to assume the worst....Please put on a mask. Practice safe living. Anything less is selfish. Anything less should be straight-up embarrassing." -- ["Not wearing a mask is as dumb as not wearing a condom" by Rex Huppke, Chicago Tribune, July 14, 2020](#)

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9: HOW ARGUMENTS ESTABLISH TRUST AND CONNECTION

9.1: An Argument Implies a Relationship

9.2: Authority

9.3: Distance and Intimacy

9.4: Shared Sense of Identity

9.5: Respect and Goodwill

9.6: Moral Character

9.7: Combining Different Approaches to Trust and Connection

9.8: Faulty Appeals to Trust

9.1: An Argument Implies a Relationship

Media Alternative

Listen to an audio version of this page (2 min, 45 sec):

As we saw in Chapter 8, arguments attempt to affect our emotions, but their success depends on how well writers have gauged their readers' values and cultural associations. Now we can back up and look at readers' responses through a different lens: that of trust. Trust provides an underlying foundation for the success of emotional and logical appeals. If we don't have a certain degree of trust in the writer, we will be less willing to let an argument affect us. We may not allow even a skillfully worded emotional appeal to move us, and we may not be ready to agree even with a well-supported claim.



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How does a writer build trust if they never come face to face with the reader? This chapter will look at various approaches to creating trust in written argument, including establishing the writer's authority on the subject, convincing readers of the writer's moral character, showing respect and goodwill, and creating a sense of closeness or shared identity. To understand each of these approaches to trust, it will help to think of an argument not as words blared through a loudspeaker into the void, but as an offering within the context of a relationship. Even as the writer explains their ideas, they are also consciously or unconsciously implying a particular relation between reader and writer.

What do I mean by relationship here? Each relationship implies expected ways people interact, and it often involves a shared identity, whether a family connection, an ethnic similarity, a job they need to complete together, or a situation they are concerned in. A relationship can be casual or formal, intimate or distanced. The writer draws the reader close, beckons the reader to their side, or holds the reader at arm's length. They choose a style typical of the role they imagine, whether of a friend, confidante, preacher, doctor, or expert. The way they address us affects how we warm to their words. When we analyze an argument, we can ask ourselves what kind of roles and interactions the words imply. Is the writer talking to us as if we were buddies? As if we were students in a lecture hall? As if we were spiritual followers? As if we were professional colleagues working together? Or as if we were the jury at a trial?



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Focusing on trust and relationship allows us to see how nuanced argument can be and how varied its effects on different readers. An argument is not an equation. Not only does it affect our emotions, but, like a movie, a song, a novel, or a poem, it invites us into a lived experience. If we accept, we grapple with ideas in an imagined encounter with another human being.

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9.2: Authority

Media Alternative

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One kind of relationship of trust is between a person who is an authority on the subject and a person who is less of an authority. The writer relates to us as a teacher and we defer to their greater knowledge. So the most common and ready way to establish trust is to make sure readers know what makes the writer an authority on the subject at hand. Here are some messages that writers send, either explicitly or implicitly, to readers about why they should be regarded as authorities. This kind of trust depends on the qualifications of the writer rather than on the style of writing. It is sometimes called **extrinsic ethos**.

"I am a recognized expert"

How can a writer convince us that they are an expert on a topic? In general, they need to show that experts in their field have recognized some level of competence or leadership in them. Different topics require different forms of expertise. If the topic fits within a particular academic field, the writer can refer to their degree and to the college, university, or think tank where they do research. The reputation of the institution they are affiliated with will affect their reputation as an expert. Readers will expect a higher level of expertise from a Yale professor, for example, then from a state college professor. Sometimes specific departments develop reputations for excellence, however. For example, those familiar with the field will know that the University of Michigan has a top sociology department.

Any work the person has produced can also serve as evidence. Publishing a book on a topic lends credibility, but if the writer can point to positive reviews of the book, robust sales, and examples where other experts have cited the book, so much the better. Newspaper and magazine articles will gain credibility from the reputation of the newspaper or magazine. We can assume that the *New York Times* and the *Wall Street Journal* have high standards and make sure that their articles represent expert knowledge.

If the topic requires professional expertise, the writer will want to point to job experience, title, role in any professional associations, and any professional awards or certifications. For example, a lawyer must pass a bar examination to be allowed to practice law, so identifying a person as a lawyer implies a certain level of expertise. If the lawyer works for a firm that is well known in its specific area of law, naming that firm will boost the lawyer's credibility further. Of course, a partner at a prestigious firm will have much more credibility than an intern.



"Eastern Sociological Association 2020 Philadelphia" by [Beverly Yuen Thompson](#) on [Flickr](#) is licensed [CC BY-NC 2.0](#).

If the writer has a public reputation as an expert above and beyond the items that could be listed on a resume, they can provide evidence of that reputation in the form of praise from other experts, number of times their work has been cited, radio or television shows where they have been interviewed, or any other sign of public recognition of expertise.

If we want to prove or assess the level of expertise of a writer, we may want to review the following list:

- Degrees earned
- Institutional affiliation
- Job title
- Job rank
- Job experience
- Awards
- Publications
- Public reputation

To be relevant, of course, all of these need to be related to the topic of the argument at hand. Dr. Phil McGraw, for example, has a Ph.D. in clinical psychology and has focused his career on mental health. He is not medically trained. Readers should only appeal to him as an expert on psychological matters.

"I have personal experience"

We are all authorities on our own experiences, feelings, and values. If something in our experience is relevant to our topic, we can speak with authority even without expertise. Using "I," also called speaking in the first person, can allow a writer to speak honestly and with conviction to further an argument. Maybe a story from our lives illustrates a larger point we want to make. Or maybe an emotional reaction to something becomes part of our argument. The sample argument about immigration which we analyzed earlier describes what the writer herself would do if she were in a desperate situation in another country and needed to flee in order to protect her children. Even though she has no experience of immigration, she can be considered an authority on her own sense of morality. Thus, the claim that she would feel justified in crossing illegally is hard to refute. From this starting point, she launches into a broader argument, claiming that others would feel the same way and that therefore, Americans need to rethink how they criminalize undocumented immigrants.

Sometimes the authority of personal experience is combined with the authority of power. This allows the CEO of a company or the director of a nonprofit or the president of a country to use the pronoun "we" to speak for their group. Thus, David Drummond, Google's senior vice-president for corporate development and chief legal officer, can title an opinion piece, "Google: We will bring books back to life." In the same [Guardian opinion piece](#) published in February, 2010, he supports a legal settlement to make copyrighted books available online, arguing that, "We at Google could make that wealth of knowledge available at a click. And authors would earn too."

"I've done my research"

When a writer has no particular qualification in relation to the subject, they can still establish a certain degree of authority by citing authoritative sources. The essence of a journalist or a science writer's job, for example, is to find and present authoritative sources. In academic research papers, we want readers to see that we have done due diligence and can represent a range of authorities on the subject. We can build credibility by describing for readers what kind of expertise each source has. MLA and APA in-text citations and Works Cited pages are designed to help us showcase our authoritative sources and allow readers to check up on them.

Practice Exercise 9.2.1

Use a popular search engine like Google to find an article about a controversial topic. Then, investigate the source of the information, such as the author, organization, or institution that published it. Consider the following questions:

- Is the source of information an authority in the topic they discuss?
- Where does the source gain their authority (i.e. by being recognized experts, by having relevant personal experience, or by doing research)?

Practice Exercise 9.2.2

Do a quick brainstorm about your life's experiences, education, and personal interests. Then, with a pair or small group, describe some areas you have authority in, and explain if you got that authority by being a recognized expert, by having relevant personal experience, or by doing research.

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9.3: Distance and Intimacy

Media Alternative

Listen to an audio version of this page (9 min, 13 sec):

Trust through Distance and Formality

Often when we think of an "authoritative style," we think of someone who speaks impersonally and with confidence, describing how some aspect of reality works without involving their own or the reader with "I," "you" or "we." This approach to earning the reader's trust is all about setting aside the personal to pursue objective, neutral, unbiased pronouncements. It requires the writer to step back from their own personality and feelings to ally their speech with impersonal truth.

A formal style indicates that the writer takes seriously the institution they are speaking for and the rigorous expectations of argument. Traditionally, academic writing is expected to be relatively formal and distanced.

Think of a judge in black robes presiding over a courtroom. The judge is there as an official, not a private individual, and what they say is understood to represent the rule of law, not their personal opinion. When they speak, they use formal language and usually describe events impersonally. As a representative of the law, they represent the government and the interests of the people as a whole.



"Hennepin County Judge Tanya Bransford" by [Tony Webster](#) on [Flickr](#), licensed [CC BY-NC 2.0](#).

Think also of a professor asked to speak on a news program about their area of expertise. Despite a climate scientist's degrees and institutional affiliation, we may not trust their personal musings about the future of humanity while flying over melting Greenland ice. Their impersonal style of speech and their focus on facts about climate, reassure us that what they tell us is unbiased, objective, neutral, and vested with all the authority of academic rigor. If they use "we" it will be to refer to their academic colleagues, as in "As climate scientists, we look at overall trends rather than specific snowstorms or heat waves." We will expect the scientist to speak in definite, precise language and to speak with a certain dignity and seriousness.

Formality and distance have their disadvantages as well as their advantages. They can make the argument seem objective and solid, but they can also alienate the reader. After all, distance means we are being pushed away. Our trust in a formal argument depends on our trust in the institutions it represents, like the government or academia. The reader may be disillusioned with these institutions or may never have trusted them in the first place. The reader may not believe that the topic calls for neutrality. We may wonder, too, what personal opinions and experiences and feelings the writer is hiding behind a mask of neutrality.

Trust through Intimacy and Informality

Over the last few decades, academia has become less wedded to the idea of objectivity and formality. In the humanities, as we have questioned the history of deferring to the white European male voice and considering it universal, many have questioned whether any observer can be objective. Even in physics, the discovery of the Heisenberg Uncertainty Principle introduced the idea that the observer affects the phenomenon observed and is not separate from it.

An alternate approach to trust involves connection rather than distance. We relate to the writer as to a friend or loved one rather than an authority figure. The writer reveals their humanity and particular responses. A sense that the writer is being open with us and inviting us into an intimate conversation leads to trust.



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An argument could be both intimate and formal, like a marriage vow, but that combination is rare. Usually the more comfortable we are and the more we share about ourselves in an argument, the less formal the style. Conversely, the less formal the style, the friendlier and more connected the argument usually feels. Of course, for this approach to work, the writer has to make the intimate conversation seem appealing and convince us they are genuine in their openness. The writer's approach and knowledge of how the reader will likely respond are key here. An informal and intimate approach can backfire if it comes across as presumptuous or invasive. The reader may be uncomfortable with the degree of closeness presumed.

So how does a writer create a sense of intimacy with a reader they will probably never meet? The more the argument can follow the style of a close conversation, the more readers may consciously or unconsciously go along with that feeling. Using an informal style will often help. That might look like casual language, the use of humor, some simpler or abbreviated sentence structure or occasional questions interjected. The most direct and obvious way to create the feeling of a conversation, however, is to declare it to the reader by using the "I," the "we" or the "you" instead of an impersonal voice.

The "I" of personal experience

Many of us have heard the advice that academic arguments should never use "I." In fact, many arguments in academic journals nowadays do use "I" on occasion, especially in introductions and conclusions. They use it judiciously when the personal experience of the writer is relevant to the argument. In addition to offering an emotional connection, personal anecdotes give readers a sense that the author is a person who is reaching out to us as people.

The ordinary 'I'

Using the first person "I" to talk about an experience that many people share can create a folksy sense of the author as a humble, ordinary person we can relate to. We might think that drawing attention to the writer's ordinariness would undermine credibility. Of course, if we are looking to find out how black holes work, we know we need to turn to an expert. But if the topic is less technical

and closer to everyday life, we may trust someone down to earth and easy to relate to more than we trust a distant authority figure.

The attention-getting “you”

When we use 'you' we are demanding the reader's attention. We can think of it as taking the reader by the hand, tapping them on the shoulder, or grabbing their collar, depending on how forceful the tone is. Papers written for college classes can use “you” on occasion, especially to command the reader’s attention in an introduction or a conclusion.

The 'we' that unites reader and writer

A writer may use 'we' to convey that they are not only in conversation with the reader other but on the same side or in the same boat. This approach is often combined with a reference to a shared identity, an appeal we will explore in the next section. It can also be used, however, to speak more generally about the writer and readers as fellow humans, as in the sentence, “We often forget that our parents were ever new to parenting.”

Practice Exercise 9.3.1

Read the two student paragraphs below and reflect on the following questions:

- What parts help you to relate to the writer as a friend?
- What words or phrases show that the writer is being open with you?
- What words or phrases make this feel like a conversation?
- Which of these two paragraphs creates more trust through intimacy overall?

Rewrite one or more sentences in each paragraph to help create more trust through intimacy.

Paragraph 1:

Due to a recent pandemic, the whole world is experiencing something that has never been experienced in all of history. In order to prevent the spread of a very contagious disease, the whole world decided to go on lockdown. Now a worldwide lockdown has never happened before, and it has led to an interesting experience that is greatly changing a lot of lives. This virus causes many interesting results when studying human behavior. However, these results are also negative, which scares people when thinking of the possible economic recession. This paper will mainly cover how this pandemic affects crime rates. With everyone locked inside, it could lead to an increase in crime with fewer witnesses out. However, with fewer people to mug and not being able to go outside for no reason, this pandemic could also lead to a decrease in the current crime rate. In order to see how crime has been affected by the pandemic, it is necessary to analyze crime before and after the lockdown.

Paragraph 2:

We generate so much hate in this world. We seem to show more hate than love to each other. We put others down. We discriminate. We judge. We persecute. We hurt those who we see differently. We act before we think. Why do we hate? Hate is such a powerful word. We have all seen or experienced acts of hate occur within our lives. Whether it's the terrorism we see on the news, or the bullying in our schools, it is extremely prevalent in every sector of our lives. The world would be a much better place if we had more empathy towards each other. Although hate and empathy can be very broad subjects, I want to focus on how giving to others can lead to less unhappiness and instead more empathy. To figure this out, we need to define what empathy truly means. We need to find the motives behind empathetic people, and then compare them with those who are hateful. We can study their respective motives and learn how to shift them.

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9.4: Shared Sense of Identity

Media Alternative

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One way to create sense of connection and trust is to point to an identity that writer and reader share. If emotions are bound up in that identity, this can be a powerful way to gain trust and to encourage readers to care about the argument. As Jeanne Fahnestock and Marie Secor put it in *A Rhetoric of Argument*, "Audience members find themselves looking into a mirror, hearing their own interests and beliefs expressed powerfully--or perhaps they hear interests and beliefs they did not know they had until they heard them expressed by their representative."



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To signal this appeal to a shared identity, writers simply name the group, as in the phrase "My fellow Americans." They may switch to an accent or specific vocabulary used by the group, a practice called "code switching." Listeners, of course, will be deciding for themselves whether the switch feels authentic. In April 2019, Representative Alejandra Ocasio-Cortez was accused of using "verbal blackface" because of the way she switched style at a dinner for the National Action Network led by prominent black leader Reverend Al Sharpton. As *The Atlantic* put it, she "sprinkled some elements of Black English into her speech." The *Atlantic* describes it thus: "I'm proud to be a bartender. Ain't nothing wrong with that," she said, also stretching "wrong" out a bit and intoning in a way sometimes referred to as a "drawl," but which is also part of the Black English tool kit." [The Atlantic defended her speech as authentic](#). They explained that "since the 1950s, long-term and intense contact between black and Latino people in urban neighborhoods has created a large overlap between Black English and, for example, "Nuyorican" English, the dialect of New York's Puerto Rican community. To a considerable extent, Latinos now speak "Ebonics" just as black people do, using the same slang and constructions."

Even if the group identity in question is not an emotionally charged one, referring to it can help readers feel connected to the writer and the argument. For example, an argument might begin, "Those of us who drink fluoridated water every day reap many health benefits, whether we know it or not." Such a reference brings the particular identity to the forefront of the reader's mind.

Sometimes writers feel that the most powerful thing they have in common with readers is opposition to a group rather than membership in a group. They can try to get readers on their side by focusing on a group they presume the reader does not or will not want to belong to. Defining that group negatively becomes the basis for unity and trust between writer and reader.

Of course, any negative characterization of a group raises ethical questions. Is the negative assessment justifiable? Is it expressed in a disrespectful or dehumanizing way? Does its use inflame divisions within society in a way that has harmful side

effects? Apart from the question of whether or not referring to another group is right in a specific case, writers should also be aware of ways in which negative references can undermine trust, especially if the audience ends up being broader than the writer initially envisioned. Sometimes putting the opposition in a group can backfire and hurt an argument more than it help. Here are two controversial examples:

- In 2016 when [Hillary Clinton referred to some Donald Trump supporters as "a basket of deplorables,"](#) she was not just criticizing their ideas but trying to make them seem other, a group no one would want to belong to. She used the phrase in a speech at an LGBT fundraising event, but news of it quickly went viral. In response, Trump declared to his supporters, "While my opponent slanders you as deplorable and irredeemable, I call you hardworking American patriots who love your country." His campaign printed shirts that read "Proud to be a deplorable." Clinton apologized for her remark soon after, but many considered that she had done irretrievable damage. In her 2017 book *What Happened*, she reflected that the comment probably contributed to her loss in the election.
- The phrase "OK Boomer," used to express Generation Z's frustration with baby boomers who seem stuck in their thinking, has been criticized as dismissive. The *New York Times* declared in October 2019 that ["'OK Boomer' Marks the End of Friendly Generational Relations."](#)

Practice Exercise 9.4.1

Look up a recent speech by a politician you admire or detest. (Try a search on "Biden speech" or "Trump speech.") What appeals to shared identity does the speech make? What assumptions about the audience does it reveal?

Practice Exercise 9.4.2

1. In a small group, find an identity unrelated to school that you share with your group members. You might consider the following questions:
 - Do you all have a sports team you like or sport you all enjoy?
 - Do you share a culture, ethnicity, country of origin, or place you grew up?
 - Do you have a language in common in addition to English?
 - What kinds of additional responsibilities do you have besides school?

Now, come up with an argument that you can aim specifically at members of the group you all belong to. See the example below.

Sample shared identity: musician

Sample controversial topic: free college

Shared identity paragraph: My fellow drummers, bassists, pianists, guitarists, and anyone else who loves to create new and exciting sounds, I am addressing you today to bring up the topic of free college, which we are totally for. Free college is better than playing the main stage at The House of Blues, and let me tell you why: it benefits the economy and provides support for low-income students. How many of us want to spend money on college instead of new guitar strings? Yeah, that's what I thought. Not to mention we are rarely paid for our work, so free college is the best way to get a new career; you know, in case this whole rockstar thing doesn't work out.

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9.5: Respect and Goodwill

Media Alternative

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We don't tend to trust people who don't respect us and don't wish us well. Regardless of how formal or informal or how intimate or distanced the argument is, if the reader feels the writer is disrespectful and doesn't care about the reader's perspective or experience, the reader will lose trust.

Conversely, if the reader feels that the writer understands the reader's perspective and uses that understanding to make the experience of reading the argument as straightforward and intellectually pleasant as possible, the reader will trust the writer more. Goodwill and respect distinguish a good argument from a rant which gives vent to the arguer's feelings while ignoring what readers might need.



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Here are a few concrete actions writers can take to show goodwill and respect toward readers:

- Express ideas in a clear and straightforward way. Making things clear often takes a lot of mental sweat. Readers generally do not appreciate having to do the work of sorting out unnecessarily convoluted sentences.
- Guide readers through the ideas with clear transitions. Showing how each part of the essay relates to the next also takes mental sweat on the part of the writer. Readers will appreciate not being left dangling at the end of one paragraph, trying to figure out why the writer switches topics in the next and how the two topics are connected.
- Tell the reader what to expect from the structure of the argument. If there will be several parts to the argument, readers may feel supported when the writer offers a clear map of what is coming. An example might be "I will first describe how neurons carry messages from the brain to other parts of the body before I explain how those messaging pathways can be disrupted in neurological disorders." Telling the readers what the writer plans to do in first person is also called the **"I" of method** because the "I" is used not to describe personal experience but to describe the writer's methods in the text itself. If there is more than one writer, as in scientific papers, of course, this would become the "we" of method. Of course, too much description of what the writer is planning to do can become boring and can get in the way of the momentum of the argument.
- Anticipate and answer likely questions. This shows respect because the writer is giving the reader credit in advance for intelligence, curiosity, and critical thinking. One way to do this is to refer to the reader directly as "you," as in "you may well ask." It can also be done in third person, as in the phrases "some will wonder" and "this raises the question of...."
- Correct misconceptions respectfully. If a writer is frustrated with popular misconceptions on a topic, they should give the reader the benefit of the doubt and politely assume that such daft misconceptions belong to others. We can refer to those

who hold the misconception in the third person in a phrase like "some may assume that" rather than targeting the reader with a "you may be assuming that..."

Practice Exercise 9.5.1

1. Read the paragraphs below and reflect on the strategies the writer used to show respect and goodwill.
 - Are there parts that are expressed clearly? Are there others that can be revised for clarity?
 - Are there enough transitions to guide you?
 - Are there any questions that show that the author gives the reader credit for intelligence, curiosity, or critical thinking? Is there a question that they could add?
2. Revise one of the paragraphs to show more respect and goodwill.

Paragraph 1

There have been many theories about the idea of nature in mental health. Many researchers have begun to investigate certain theories that focus on the correlation between our cognitive processes and the natural world. The most recognized theories are the Attention Restoration Theory (ART), the Stress Reduction Theory (SRT), and specific preferences for nature. The Attention Restoration Theory (ART), developed and popularized by Stephen and Rachel Kaplan, professors of psychology at the University of Michigan, proposes that exposure to nature can help us improve our ability to concentrate as well as reduce the stress through the automatic generation of physiologic responses. This can be attributed to the more relaxed sensation people may have when exposed to a natural environment. Stephen and Rachel Kaplan also proposed that there are four cognitive states on the way to restoration, which include a clearer head/concentration, mental fatigue recovery, soft fascination/interest, and reflection and restoration. In the first stage, thoughts, worries, and concerns are passed through the mind and are simply flowing through the mind naturally. During the second stage, restoration begins as the directed attention recovers and is restored. The third stage is focused on distracting the individual as they become engaged in low restoring activities, giving them time and space to calm down. Lastly, as a result of spending time in this environment, the individual can feel like they can relax and reflect on themselves and their goals. This is the most essential part of the restorative stage.

Paragraph 2

One factor that social media primarily affects are sleep patterns. A study concluded that 37% of 268 young adolescents confirmed that increased internet use is associated with shorter sleep duration, later bedtimes and rise times, longer sleep latencies, and increased daytime tiredness (Woods 1). Sleep in a teenager's life is one of the utmost important factors to healthy development. According to Better Health, sleep deprivation can cause an unhealthy mental state that can lead to depression, aggression, low self-esteem, reduced physical and academic performance, and poor decision making. This leads to a vicious cycle: the cell phone causes sleep deprivation, which then causes mental health issues, which are confronted with more cell phone use. This is problematic because they distract themselves with their devices and don't realize they need professional help.

9.6: Moral Character

Media Alternative

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A part of our trust in a writer or in another person in any relationship is based on our perception of their moral character. Do they share the values we find most important? The word "character" has connotations of both firmness and fairness. A person with character stands up for their beliefs and is principled rather than self-interested. Note that there is some overlap between the trust appeal discussed in [Section 9.5: Respect and Goodwill](#) and a trust appeal through good moral character. A basic element of good moral character is wishing others well, not ill.



Just as people signal their moral character in how we present ourselves, writers can signal moral character through their writing choices.

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Famous basketball coach John Wooden declared that "The true test of a man's character is what he does when no one is watching." Still, as humans, we constantly watch each other and assess each other's character. A writer can seek to gain the reader's trust by drawing attention to their moral character either directly or indirectly. In a direct appeal, a writer might describe their values, tell stories that illustrate their past moral actions, mention their reputation for good character, or refer readers to others who can vouch for them.

If a writer anticipates that some will question their character, they can present **disclaimers**, or rejections of others' likely misconceptions. Imagine an argument that starts by asking how Robin Hood might be a relevant hero for today's America. The writer would quickly need to clarify that they are not condoning stealing: "I would never argue that we should actually steal from the rich as Robin Hood did." Such a disclaimer is usually followed by a clarification of their position which highlights their good character: "I do think that the character of Robin Hood is an inspiration for today's advocates of a wealth tax to fund education and combat rising inequality."

Direct references to a writer's moral character run the risk of coming across as arrogant or presumptuous. More common and arguably more effective are indirect attempts to demonstrate moral character in the way a writer makes their argument. As Jeanne Fahnestock and Marie Secor write in *A Rhetoric of Argument*, "We all know that character shows in what we say and do. It is equally obvious in what we write." Honesty and reasonableness are two aspects of character that are especially crucial to demonstrate in argument.

Honesty

Abraham Lincoln was known in his day and after as "Honest Abe." His reputation as such, along with his accomplishments, formed the core of his image as an American hero. Probably nothing is more important to establishing trust than truthfulness and openness.

Even lies of omission can undermine trust. As readers, we want to believe that the writer is giving us a fair overview of what they know. If a writer fails to mention something relevant that makes them look bad, readers may well hear it from an opponent and consider the writer to have wrongly concealed it. Acknowledging points that actually hurt the writer's argument can help to demonstrate openness and honesty. This includes a writer's motivations, even those that involve self-interest. This may involve a disclaimer like the following: "It is true that I have an interest in maintaining high enrollment at our community college, since my job depends on it. But I do not think that is my main motivation for supporting the push to expand our offerings. I believe that the community will benefit when we have greater community participation in adult education."

Another aspect of honesty is emotional honesty--the writer's sincerity about the values and feelings expressed. If the writer has made an emotional appeal or an appeal to shared values, we as readers need to believe that the appeal represents the writer's authentic feelings and values. If we feel we are being **manipulated**, we will likely recoil and resist both the emotions and the logic of the argument. How can we tell if a writer is sincere or not? There is no formula for this, just as there is no formula when we meet someone or listen to a speech and decide if the person is sincere. Readers' intuitions will be shaped by subtleties of word choice and cultural expectations. One highly dramatic emotional appeal or declaration of values may come across as exaggerated, and another may come across as an earnest expression of the writer's strong convictions. In my own opinion, the best way for writers to create an impression of sincerity is to be sincere, not just about their feelings but about the degree of intensity of these feelings.

Reasonableness

It is our reason that allows us to make and evaluate arguments, so it comes as no surprise that writers want to come across as reasonable. Of course, as we have seen in earlier chapters, writers must actually make reasoned arguments or readers will notice their logical flaws and lose some trust in them. But to trust a writer, readers also need to have the impression that the writer is reasonable as a character trait.

Here are some ways writers show themselves to be reasonable:

- Responding to alternate perspectives with **respect**. Even when you do not see any merit in the opposing argument, As Jeanne Fahnestock and Marie Secor put it, "Without conceding to the opposition, you can show your audience that you treat other positions with respect, understanding, and even kindness." We can show empathy for the motivations or perspectives of others even if we ultimately judge them to be misguided.
- Showing **fairness** toward alternate perspectives. We see reasonableness in the ways in which writers deal with challenges to their ideas. Do they summarize the challenge accurately without distorting it to make it seem worse or weaker than it is?
- Showing **openness** to possibilities that may challenge the writer's expectations. There is some overlap here with honesty as discussed above.
- Making **concessions** when they see some validity to an opposing point.
- Showing **moderation**. A writer can send the message that they are not an extremist by pointing out and disavowing more extreme positions.
- Admitting **uncertainty**. As Jeanne Fahnestock and Marie Secor put it "When you honestly find yourself somewhat uncertain on an issue, even after thinking through some arguments, you can shift into a lower gear by admitting your own uncertainty, the tentative nature of some of your conclusions, your openness to new ideas."

Note that too much moderation can come across as wishy-washy. Good moral character also requires **conviction** and backbone. A writer must balance being open and self-critical with being willing to take a stand and defend it.

Practice Exercise 9.6.1

Find a speech by a president, former president, or presidential candidate and reflect on how the speaker attempts to establish good moral character in the speech. Which of the strategies listed above do they employ? How well do these strategies work to convince you of the speaker's character?

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9.7: Combining Different Approaches to Trust and Connection

Media Alternative

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Just as arguments can change tone and emotional appeal, they can appeal to trust differently and create different imagined relationships with the reader at different moments. Arguments don't need to choose one point of view and stick with it; many arguments move between "I," "we," "you" and the impersonal, shifting from sentence to sentence. Too many shifts could be jarring for the reader, but some variety can be refreshing. Thus, a single argument can offer different ways for the reader to relate to the ideas at hand.

For example, the sample border argument we have analyzed starts with a personal declaration, but if it stayed with "I" throughout it would never be able to make an argument about policy. Usually, the first person in argument is combined with other approaches so that the argument can be extended beyond the personal. Let's look at how the appeals to trust and connection shift in the last two paragraphs of the border argument:

Argument Excerpt	Notes on the Point of View
If I were raising children in an impoverished third-world community plagued by violence, and if I had a chance to get my family to the U.S., I would take it.	"I": The argument starts out with a personal declaration of what the author herself would do. The repeated emphasis on the "I" provides a contrast to most news accounts which refer to undocumented immigrants as "they." It attempts to reverse a sense that such immigrants are an outgroup. The mention of the word "family" provides the first hint of the appeal to shared values around family loyalty and caring for family members.
I would try to cross a border illegally so my children would get enough to eat and would have a more stable childhood and a chance at a better education and a better career.	This focuses on a shared value around parents' obligation to nurture their children with references to children's basic needs.
What parent would sit on their hands and tell themselves, "I want to give my child a better life, but oh well. If I don't have the papers, I guess it would be wrong"?	The paragraph ends with a third-person rhetorical question, implying that all parents would do the same. Saying this in the impersonal third person conveys the idea that it is a neutral, objective fact. The argument imagines and rejects as ridiculous an "I" statement by an imaginary parent. This statement is deliberately exaggerated in its contrast between the powerful emotional phrase "give my child a better life" and the rather mundane "I don't have the papers."
If most of us, under desperate circumstances, would cross the border without permission and feel no moral qualms about doing so, then we must recognize this crossing as an ethical, reasonable act.	The argument switches to "us" and "we," extending the initial personal statement to include the readers in a group united by a sense that their obligation to nurture their children takes priority over the obligation to follow immigration law.

If it is ethical and reasonable, then how can either a wall or a detention center be on the side of justice?	The impersonal rhetorical question implies the general claim that walls and detention centers are not right.
We must find a policy that treats migrants as we would want to be treated—with empathy, respect, and offers of help.	The argument returns to the “we,” ending with a sense that writer and readers are united with a common, urgent moral purpose.

Practice Exercise 9.7.1

Choose a [Ted talk](#) that includes a transcript, such as Jamila Lysicott’s “[3 ways to speak English](#).” Watch the talk and then read the transcript, making notes in the margins on the level of intimacy, degree of formality, appeals to authority, and mentions of moral character or shared identity. Choose one place where the writing shifts from one way of connecting to the reader to another and reflect on why the writer chose to shift at that point.

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9.8: Faulty Appeals to Trust

Media Alternative

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Just as we saw with [appeals to emotion](#), appeals to trust and connection may or may not work. But apart from the question of whether or not they work is the question of whether or not they are legitimate. Here are three questions to ask about the legitimacy of any appeal to trust:

- Does the attempt to get the reader to trust suggest an idea that is not logical or not true?
- To what extent is the appeal to trust really relevant to the trustworthiness of the argument?
- Is the argument asking for more trust than is really warranted? Even if the attempt to gain our trust is logical and relevant, we should ask whether its importance has been exaggerated. Our decision to trust should be based on many different factors. Often appeals to trust imply that we should accept or reject a claim outright when in reality more caution is called for.

We will see answers to the above questions in each of the following faulty appeals to trust:

Insincere appeals to shared identity or values

Obviously, lying about who we are or what we believe in is not a valid way to build trust. An appeal to a shared identity that is not really shared or an appeal to a shared value that the writer does not really hold is certainly a breach of trust.



An insincere appeal to trust often comes across as creepy.
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However, referring to an identity that the writer doesn't share can be a legitimate gesture of goodwill, as long as the writer doesn't misrepresent their own background. A white politician who interjects Spanish words into a speech to a largely Latinx audience is signaling that they want to appear friendly and empathetic to a Latinx identity. Of course, the politician's accent may undermine this to some extent by reminding the audience of their different background. Will the audience be glad that the politician is trying? Will they be put off by a sense that the politician is presuming too much or encroaching on an identity that doesn't belong to them? Writers will often try to signal respect and familiarity if they do refer to another group's identity, as in "I know from talking to transgender friends that using a single-gender restroom can feel stressful and dangerous."

Appeal to popularity (bandwagon)

An extremely common technique is to suggest that a claim is true because it is widely accepted. Of course, we do legitimately need to refer to other people's opinions as guides to our own at times. An idea's popularity may be a legitimate reason to investigate it further. It might be a reason to consider it influential and thus important to address in a discussion. But its popularity does not prove its validity. Popularity may be due to the correctness of the idea but it may be due to many other reasons as well.



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Appeals to popularity encourage readers to base their decisions too much on their underlying desire to fit in, to be hip to what everybody else is doing, not to be considered crazy. Imagine that a talk show host introduces a guest as the author of a #1 *New York Times* bestseller about climate change and the coming apocalypse. But this is a fallacy. We've all known it's a fallacy since we were little kids, the first time we did something wrong because all of our friends were doing it, too, and our mom or dad asked us, "If all of your friends jumped off a bridge, would you do that too?"

Personal attacks

We commit this fallacy when, instead of attacking an opponent's views, we attack the opponent. What makes this a fallacy is the disconnect between the reason and the claim. Logicians call this an **ad hominem** fallacy, which means "to the person." The opponent may have bad qualities, but these qualities do not make their argument incorrect. They may give legitimate reason to trust the argument less, but they do not invalidate it.



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This fallacy comes in various forms; there are a lot of different ways to attack a person while ignoring (or downplaying) their actual arguments. **Abusive attacks** are the most straightforward. The simplest version is simply calling your opponent names instead of debating them. Donald Trump has mastered this technique. During the 2016 Republican presidential primary, he came up with catchy nicknames for his opponents, which he used just about every time he referred to them: “Lyn’ Ted” Cruz, “Little Marco” Rubio, “Low-Energy Jeb” Bush. If you pepper your descriptions of your opponent with tendentious, unflattering, politically charged language, you can get a rhetorical leg-up.

Another abusive attack is **guilt by association**. Here, you tarnish your opponent by associating them or his views with someone or something that your audience despises. Consider the following:

Former Vice President Dick Cheney was an advocate of a strong version of the so-called Unitary Executive interpretation of the Constitution, according to which the president’s control over the executive branch of government is quite firm and far-reaching. The effect of this is to concentrate a tremendous amount of power in the Chief Executive, such that those powers arguably eclipse those of the supposedly co-equal Legislative and Judicial branches of government. You know who else was in favor of a very strong, powerful Chief Executive? That’s right, Hitler.

The argument just compared Dick Cheney to Hitler with only the tiniest shred of evidence. That evidence is not sufficient to make a legitimate comparison: if it were, then any person who favored giving most government power to one leader could be compared to Hitler. Clearly, consolidating power was not the most significant thing Hitler did, nor, in itself, is it the reason we have such negative associations with his name. Those powerful negative associations make comparisons to Hitler and the Nazis a powerful rhetorical strategy which is often used when it isn’t justified. There is even a fake-Latin term for the tactic: Argumentum ad Nazium (cf. the real Latin phrase, ad nauseum—to the point of nausea).

A **circumstantial attack** is not as blunt an instrument as its abusive counterpart. It also involves attacking one’s opponent, focusing on some aspect of their person—their circumstances—as the core of the criticism. This version of the fallacy comes in many different forms, and some of the circumstantial criticisms involved raise legitimate concerns about the relationship between the arguer and his argument. They only become fallacies when these criticisms are taken to be definitive refutations, which, on their own, they cannot be.

To see what we’re talking about, consider the circumstantial attack that points out one’s opponent’s self-interest in making the argument they do. Consider:

A recent study from scientists at the University of Minnesota claims to show that glyphosate—the main active ingredient in the widely used herbicide Roundup—is safe for humans to use. But guess whose business school just got a huge donation from Monsanto, the company that produces Roundup? That’s right, the University of Minnesota. Ever hear of conflict of interest? This study is junk, just like the product it’s defending.

This argument is flawed. It doesn't follow from the fact that the University received a grant from Monsanto that scientists working at that school faked the results of a study. But the fact of the grant does raise a red flag. There may be some conflict of interest at play. Such things have happened in the past (e.g., studies funded by Big Tobacco showing that smoking is harmless). But raising the possibility of a conflict is not enough, on its own, to show that the study in question can be dismissed out of hand. It may be appropriate to subject it to heightened scrutiny, but we cannot shirk our duty to assess its arguments on their merits.

A similar thing happens when we point to the hypocrisy of someone making a certain argument—when their actions are inconsistent with the conclusion they're trying to convince us of. Consider the following:

The head of the local branch of the American Federation of Teachers union wrote an op-ed yesterday in which she defended public school teachers from criticism and made the case that public schools' quality has never been higher. But guess what? She sends her own kids to private schools out in the suburbs! What a hypocrite. The public school system is a wreck and we need more accountability for teachers.

This passage makes a strong point, but then commits a fallacy. It would appear that, indeed, the AFT leader is hypocritical; her choice to send her kids to private schools suggests (but doesn't necessarily prove) that she doesn't believe her own assertions about the quality of public schools. Again, this raises a red flag about her arguments; it's a reason to subject them to heightened scrutiny. But it is not a sufficient reason to reject them out of hand, and to accept the opposite of her conclusions. That's committing a fallacy. She may have perfectly good reasons, having nothing to do with the allegedly low quality of public schools, for sending her kids to the private school in the suburbs. Or she may not. She may secretly think, deep down, that her kids would be better off not going to public schools. But none of this means her arguments in the op-ed should be dismissed; it's beside the point. Do her reasons back up her conclusion? Are her reasons true? Even if the person arguing is hypocritical, they may still be making a sound argument. We still need to decide whether their reasoning is valid before rejecting the argument.

A very specific version of the circumstantial attack, one that involves pointing out one's opponent's hypocrisy, is worth highlighting, since it happens so frequently. It has its own Latin name: **tu quoque**, which translates roughly as "you, too." This is the "I know you are but what am I?" fallacy; the "pot calling the kettle black"; "look who's talking". It's a technique used in very specific circumstances: your opponent accuses you of doing or advocating something that's wrong, and, instead of making an argument to defend the rightness of your actions, you simply throw the accusation back in your opponent's face—they did it too. But that doesn't make it right.

The final variant of the circumstantial attack is perhaps the most egregious. It's certainly the most ambitious: it's a preemptive attack on one's opponent to the effect that, because of the type of person they are, nothing they say on a particular topic can be taken seriously; they are excluded entirely from debate. It's called **poisoning the well**. We poison the well when we exclude someone from a debate because of who they are. Imagine an English person saying, "It seems to me that you Americans should reform your healthcare system. Costs over here are much higher than they are in England. And you have millions of people who don't even have access to healthcare. In the UK, medical care is a basic right of every citizen." Suppose an American responded by saying, "What you know about it? Go back to England." That would be poisoning the well. The English person is excluded from debating American healthcare just because of who they are.

Practice Exercise 9.8.1

The following short critique mentions something about the author of the argument they critique. Do you think there is a legitimate reason to make this personal reference? Does it convincingly undermine the argument that "women can have it all"?

The legendary Cosmo Girl, Helen Gurley Brown, died and with her, one hopes, a not-so-fabulous legacy. This would be the demonstrably ridiculous notion women can have it all. ... The most telling line from all the tributes written about her might provide a clue. Brown said she never had children because 'I didn't want to give up the time, the love, the money.

--Kathleen Parker, "Death of a Salesgirl," Index-Journal 94 No. 110 (18 Aug. 2012).

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10: WRITING AN ANALYSIS OF AN ARGUMENT'S STRATEGIES

10.1: How Argument Analysis Essays are Structured

10.2: Generating Ideas for an Argument Analysis Paper

10.3: Reviewing an Argument Analysis Essay

10.4: A Brief Sample Argument Analysis Essay

10.5: A Longer Sample Argument Analysis Essay

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10.1: How Argument Analysis Essays are Structured

Media Alternative

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In some humanities classes in college, you may be asked to write a kind of paper that goes further than a summary, an assessment or a response paper in describing another writer's argument. Such an **argument analysis**, also called a **rhetorical analysis**, asks you to describe what the other writer is up to, not just in terms of ideas but in terms of all the strategies they used to make the argument convincing. You become a kind of detective, piecing together the moves the writer made, the reasons for them, and their likely effects on readers.



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In such an essay, you will need to analyze and evaluate the quality of the logical reasoning, as we learned to do in [Chapter 4: Assessing the Strength of an Argument](#). But you will also need to describe and evaluate how the writer seeks to affect readers' emotions and gain readers' trust. How well are the author's appeals to trust and emotion likely to work? Will readers likely respond as the writer imagines?

The introduction should include the title of the argument you analyze and several sentences that summarize the argument. Imagining an audience unfamiliar with the argument will encourage you to choose your words carefully and offer full explanations. After introducing readers to the content of the argument, you can state your thesis: your assessment of how convincing the argument is and what its weaknesses are, if any.

There is a lot to cover in such a paper since you will need to summarize and analyze the ideas, identify strategies the author has used, and discuss how readers will respond to these strategies. With so many points to discuss, you may wonder how you can create a cohesive thesis. The key is to focus on what you consider to be most important in propelling the argument forward or sinking it. A thesis can pick two or three important aspects of the argument and identify them as strengths or weaknesses. The more you can group several different strategies together under a common theme, the more focused and memorable your thesis becomes. For example, if a writer uses "we" to refer to Latinx people, inserts Spanish phrases, and tells a moving story of a family's immigration to the U.S. from Mexico, you could refer to all three of those aspects of the argument at once in your thesis by noting that the writer "appeals to readers' Latinx identity."

Each body paragraph can focus on just one aspect of the reasoning or on an argumentative strategy. In the above example, you could develop one paragraph about the use of "we" to refer to Latinx people, another paragraph about the use of the Spanish

language in the argument, and another about how the writer introduces a Spanish-speaking immigrant story. Your transitions could refer to what these paragraphs have in common—a reference to Latinx identity. To support your ideas in each body paragraph, you can use evidence in the form of quotations and paraphrases from the argument analyzed.

The conclusion should provide some assessment of the overall effectiveness of the argument. You can make a prediction about how most readers will respond in the end. Given the combination of logical strength or weakness and appeals to trust and emotion, how convinced will readers likely be? Are there any lessons we can learn from the successes or failures of this argument?



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10.2: Generating Ideas for an Argument Analysis Paper

Media Alternative

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Here are some questions to consider each in relation to the argument you are analyzing. Unless your teacher specifically asks you to cover all of these questions, you will eventually want to pick and choose what you discuss in your argument analysis essay. (The essay would likely read like a list rather than a cohesive group of connected paragraphs if you did include everything.) However, it will probably help you to consider each of these before you start your rough draft to see what might be most important or interesting to focus on in your analysis.

Analyzing the Ideas

[Chapter 2: Reading to Figure out the Argument](#) describes how to map out the core ideas in the argument you are analyzing in order to write a clear summary as part of your analysis. Here are some specific questions to brainstorm on:

- What are the key claims?
- What are the reasons given for each of these key claims?
- Are the reasons ideas that are generally agreed upon, or do any of these reasons need additional support?
- What kind of evidence does the writer provide, and how convincing is it?
- Does the reader make assumptions that should be questioned or supported?
- What limits does the writer place on the key claims?
- Can we imagine exceptions or limits that the writer has not noted?
- What counterarguments, if any, does the writer refer to?
- Does the writer describe any counterarguments fairly?
- Does the writer miss any important counterarguments?
- How does the writer respond to any counterarguments mentioned?
- Are the responses convincing? Why or why not?
- Are there any places where the writer's meaning is unclear?
- Are there any [fallacies](#) or [problems with the logic](#)?

Analyzing the Emotional Appeals

[Chapter 8: How Arguments Appeal to Emotion](#) describes what to look for. Here are some specific questions:

- How would you describe the tone of the argument? Does the argument change tone at any point, and if so, why?
- How does the argument establish a sense that it is important, urgent, relevant or somehow worth reading?
- Does the argument choose words with particular emotional connotations to further the argument?
- Does the argument use powerful examples to affect readers' emotions?
- Does the argument appeal to readers' self-interest?
- Does the argument appeal to the readers' sense of identity?
- Will different groups of readers likely respond to the argument in different ways?

Analyzing Appeals to Trust and Connection

[Chapter 9: How Arguments Establish Trust and Connection](#) describes the many ways an argument might do this. Here are some questions to brainstorm on:

- What makes the writer qualified to make the argument?
- Does the writer have credentials or professional training which make them an authority?
- Does the writer point to relevant personal experience?

- How does the writer show goodwill and respect toward readers?
- How does the writer attempt to convince us of their good moral character?
- Does the argument appeal to any particular shared values to establish trust?
- How does the writer try to create the impression that they are reasonable?
- Do they succeed in appearing reasonable?
- How does the argument seem to imagine the relationship between writer and reader?
- Does the writer take a more formal or informal approach to creating trust?
- To what extent does the argument depend on a shared sense of identity for trust?
- Does the argument attempt to undermine trust in an opposing group?
- What point of view ("I," "we," "you," or an impersonal point of view) does the writer use most frequently?
- How does this point of view affect the reader?
- When does the writer switch to a different point of view, and why?

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10.3: Reviewing an Argument Analysis Essay

Media Alternative

Listen to an audio version of this page (1 min, 21 sec):

Whether you are revising your own draft or reviewing a classmate's draft, you can start by asking yourself the following questions:

- Is the thesis clear, specific, and focused? Does it tell us what is important or interesting about the argument's attempt to convince us and/or give a central reason for its success or failure?
- Does the essay articulate the main claims, reasons, and any important assumptions of the argument, whether implicit or explicit?
- Does the essay convincingly identify at least two key important strategies the argument uses to establish credibility and trust or affect the reader's emotions?
- Does the essay assess the effectiveness of the strategies and identify any potential pitfalls or ways in which the strategies could backfire?
- Does each body paragraph have sufficient quotations or paraphrases of specific examples?
- Does it introduce quotations and paraphrases signal phrases that accurately show us the argument's purpose?
- Does the conclusion offer a final evaluation of the argument and its significance, value, or implications?
- Does the essay clearly show how one paragraph connects to the next and back to the thesis?

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10.4: A Brief Sample Argument Analysis Essay

Media Alternative

Listen to an audio version of this page (29 sec):

The brief essay "Henig's Perspective on the Gender Revolution" by student Jun Stephens can serve as an example of argument analysis.

- [Sample argument analysis essay "Henig's Perspective on the Gender Revolution" in PDF with margin notes](#)
- [Sample argument analysis essay "Henig's Perspective on the Gender Revolution" accessible version with notes in parentheses](#)

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10.5: A Longer Sample Argument Analysis Essay

Media Alternative

Listen to an audio version of this page (28 sec):

The essay "Argument Analysis of Cory Doctorow's 'Why I Won't Buy an iPad (and Think You Shouldn't, Either)'" can serve as an example.

- [Sample argument analysis essay "Argument Analysis of Cory Doctorow's 'Why I Won't Buy an iPad \(and Think You Shouldn't, Either\)'" in PDF with margin notes](#)
- [Sample argument analysis essay "Argument Analysis of Cory Doctorow's 'Why I Won't Buy an iPad \(and Think You Shouldn't, Either\)'" accessible version with notes in parentheses](#)

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11: SHAPING SENTENCES TO DRIVE YOUR POINTS HOME

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11.4: Giving the Reader Pleasure

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11.1: Writing Like You Drive

Media Alternative

Listen to an audio version of this page (4 min, 26 sec):

Prioritize clarity

"Style" refers to the way in which a writer expresses something. Much as clothing style can shape how we see a person, writing style can shape how we feel about the writer and their ideas. A writing style can give pleasure through elegant, graceful, and pleasing word combinations.

However, most writers and teachers of writing agree that clarity should be our first goal. Any stylistic choices we make should also help our readers understand our points. In turn, writing clearly will generally make for good style. British poet Matthew Arnold advised "Have something to say, and say it as clearly as you can. That is the only secret of style."¹



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Avoid academese

Professors and students alike can be tempted to write in a wordy, complex, self-consciously scholarly style. This is an understandable mistake. We want to make our words sound formal and authoritative in part because, in the past, academic culture has favored such an ornamented style. Some call it "**academese**." Compare the following two versions of a sentence:

Academese style: "To satisfy her hunger for nutrition, she consumed the bread."

Straightforward style: "She was hungry, so she ate the bread."¹

Clearly, the academese style runs the risk of becoming tedious and alienating readers. Unnecessary jargon, fancy vocabulary, and convoluted sentences can make anything harder to understand.

The academese style also signals elitism. It shows off a high level of education. As Joseph Williams puts it, "it is a language of

exclusion that a diverse and democratic society cannot tolerate."² The culture is shifting among scholars to favor plainer language and insist on clarity. Readers, including professors, are much more likely to find a self-consciously highbrow writing style annoying rather than impressive. As the saying goes³, any fool can make simple things complicated; it takes a genius to make complicated things simple.

Of course, as writers we look for ways to develop confidence in our voices, to take ourselves seriously and make sure we are taken seriously. We can develop this sense of confidence, however, without fancy vocabulary or a hyper-formal, fussy style. Removing the pressure to sound academic can be a relief. Sometimes we can just say something very bluntly and simply and leave it at that. Confidence will come as we clarify our thinking, and writing in a straightforward style can help us to do that. Unclear and bloated prose gets in the way, both for the writer and the reader. Focusing on saying plainly what we mean can free us up to make intellectual progress.



Confidence, directness, and simplicity in writing inspire trust, as they do in in-person interactions.
Photo by Paula Bronstein for the [Hewlett Foundation's Images of Empowerment](#), licensed [CC BY NC 4.0](#).

Don't worry about style until the end

The best way to achieve clarity and concision in writing is to separate the drafting process from the revision process. Experienced writers routinely produce vague, tortuous, and bloated drafts, and are happy to do so. It usually means that we're onto an interesting idea. We may express the same idea in three or four different ways as we're getting thoughts down on paper. That's fine. In fact, each repetition helps us develop key ideas and alternative approaches to conveying them. A snarly first draft is often a great achievement. We just need to allow ourselves the time at the end of the writing process to revise for clarity and concision (See [Chapter 11: The Writing Process](#)).

Once we have our ideas clear, it will be easier to write effective sentences. Editing for style can then be a satisfying and not overly burdensome part of the process. One common metaphor notes that a good edit is like the last twist of a camera lens that brings the whole picture into focus. In the following sections we will look at ways to edit sentences for clarity, concision, balance, and variety.

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References

¹Michael Harvey, *The Nuts and Bolts of College Writing*. (Indianapolis, IN: Hackett, 2003), 3.

²Joseph Williams, *Style: Ten Lessons in Clarity and Grace*. (New York, NY: Longman, 2003), 4.

³ Variously attributed to Albert Einstein, E.F. Schumacher, and Woody Guthrie.

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11.2: Keeping It Concise

Media Alternative

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Why is it important to be concise?

As we develop our ideas in a draft, we are likely to repeat the same point in different phrases and sentences. In drafting, we are still thinking our ideas out and searching for the best way to articulate it. However, readers often don't want to read all those versions of the same thing. If we can cut out repetition in the final version, we can create a more lively, interesting, and focused piece. Cutting out excess wordiness can help make space for new, related ideas and a stronger argument.



Readers may roll their eyes when writers go on and on.
"Eye Roll" by Jaysin Trevino on Flickr is licensed CC BY 2.0.

A general rule to go by is that every word and sentence should be doing some significant work for the paper as a whole. Sometimes that work is more to provide pleasure than meaning—we needn't ruthlessly eliminate every flourish—but each phrase in the final version should add something unique to the paper.

Of course, we may be tempted to add padding to our writing to meet the length criteria for an assignment. But such padding will be tedious for readers, including the instructor. Often, instructors require a certain word count because they can't imagine a shorter piece of writing meeting the goals of the assignment. If our writing isn't long enough yet, a good first move is to go back to the assignment description and see if there's anything we haven't fully addressed.

Michael Harvey¹ notes that sometimes we may be reluctant to write concisely because it makes us feel more vulnerable. Wordiness may seem to add to our academic credibility, and it can cover over areas of uncertainty. Harvey writes,

[M]any of us are afraid of writing concisely because doing so can make us feel exposed. Concision leaves us fewer words to hide behind. Our insights and ideas might appear puny stripped of those inessential words, phrases, and sentences in which we rough them out. We might even wonder, were we to cut out the fat, would anything be left?

As writers, we may need encouragement from peers and teachers to gradually gain confidence and trust that our ideas, even in their barest, simplest forms, are worthwhile. Others will take our writing seriously when it is clear and substantive.

Strategies for eliminating wordiness

It's best to wait until the final stage of the revision process to look for wordiness. (For more on how to prioritize, see [Chapter 11: The Writing Process](#).) Then, we can try the strategies below. The more we do this, the more it will become second nature.

1. Look for words and phrases that you can cut entirely. Some bits may be redundant or meaningless, as in the following phrases, where the italicized words can be cut:
 - each *and every*
 - *unexpected* surprise
 - predictions *about the future*
 - *very* unique
 - *certain* factors
 - *slightly* terrifying
2. Look for opportunities to replace longer phrases with shorter phrases or words. For example, “the way in which” can often be replaced by “how” and “despite the fact that” can usually be replaced by “although.” Strong, precise verbs can often replace bloated phrases. Consider this example: “The goal of Alexander the Great was to create a united empire across a vast distance.” And compare it to this: “Alexander the Great sought to unite a vast empire.”
3. Try to rearrange sentences or passages to make them shorter and livelier. Williams and Bizup² recommend changing negatives to affirmatives. Consider the negatives in this sentence: “School nurses often do not notice if a young schoolchild does not have adequate food at home.” You could more concisely and clearly write, “School nurses rarely notice if a young schoolchild lacks adequate food at home.” It says the same thing, but is much easier to read which makes for a happier and more engaged reader.
4. Good parallelism can also help us write shorter text that better conveys our thinking. For example, Stacy Schiff writes this in her best-selling biography of Cleopatra³:

A goddess as a child, a queen at eighteen, a celebrity soon thereafter, she was an object of speculation and veneration, gossip and legend, even in her own time.

Imagine if, instead, Schiff wrote this:

Cleopatra was seen as divine when she was a child. She became the sovereign ruler at eighteen, and she became well known throughout the ancient world early in her reign. People speculated about her, worshipped her, gossiped about her, and told legends about her, even in her own time.

The second version says the same thing, but the extra words tend to obscure Schiff's point. The original (“*goddess* as a child, *queen* at eighteen, *celebrity* soon thereafter”) uses parallelism to vividly convey the dramatic shifts in Cleopatra's roles and her prominence in the ancient world. See [13.10: Parallelism](#) for more on how to create parallel structure.

Exercise 11.2.1

Edit these passages for concision, using the three moves described above. Be sure to preserve all of the meaning contained in the original.

1. Each and every student enrolled in our educational institutions deserves and is entitled to competent instruction in all of the key academic areas of study. No student should be without ample time and help in mastering such basic skills.
2. If you really have no choice in regards to avoiding a long and extended bureaucratic process in making your complaint, it is very important that you write down and document every aspect of the case for use by all of the parties involved in the process.

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References

¹Michael Harvey, *The Nuts and Bolts of College Writing*. (Indianapolis, IN: Hackett, 2003), 1.

²Williams and Bizup, *Style*, 130.

³Stacy Schiff, *Cleopatra: A Life* (Boston, MA: Back Bay Books, 2011), 1.

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11.3: Making Sentences Clear

Media Alternative

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What makes a complex line of thinking easy to follow? Williams and Bizup offer another key point. They explain that readers experience writing as clear when the “character” of a sentence is also its grammatical subject and the key “action” a grammatical verb. They provide this fanciful example:¹

Once upon a time, as a walk through the woods was taking place on the part of Little Red Riding Hood, the Wolf’s jump out from behind a tree caused her fright.

Grammatically, the subject of the first part is “a walk through the woods,” and the verb is “taking place”. The character, though, is obviously Little Red Riding Hood and the action is walking. A much more straightforward version—“As Little Red Riding Hood walked through the woods”—makes the character the subject and the action the key verb. That example goes out of its way to be silly, but consider this example from a website offering free college papers:²

Another event that connects the colonist and the English together is the event of a hated King in England trying to take away freedom and go back to the old ways. The idea of how much power the King had struck Parliament. After that, the Parliament and the people made the King sign the Magna Carta, which limits the amount of power the King has. The Magna Carta also affected the rights of the American colonies. It practically took away all relationships between the King and the colonies. After the relationship was broken, America broke off from England.

Apparently, the author is claiming that the colonists (in the 1700s?) pushed back against the power of the English crown in a manner similar to the Parliamentarians in 1215 (after having apparently been “struck” by an “idea” of “how much power the King had”). Grammatically, the subjects are an “event” and an “idea” rather than the characters, colonists, the king, and Parliament. The third sentence is refreshingly straightforward in structure (though vague on details). The fifth and sixth sentences are fairly straightforward, but also incredibly vague: the Magna Carta predated the American colonies by at least 400 years³; how does that document relate to the American Revolution? The last sentence essentially says that after the relationship was broken, the relationship was broken. If the author were to rewrite the passage to make the grammatical subjects match the characters, he or she would be prompted to clarify what exactly the king, the Parliament, the English populace, and the American colonists did (and to who), something which the author of the above passage may not actually understand. This example illustrates how clarifying “who did what to whom” for the reader also makes writers clarify it for themselves. Writing clearly involves thinking clearly, and clear rigorous thinking is why your professors assign you writing in the first place.

While the Magna Carta example is comically bad, here’s one that is more or less logical but would still benefit from greater clarity:

IgE-dependent allergic hypersensitivity reactions such as allergic asthma and food allergy involve mast cells which are typically regarded as troublesome cells as a result. Further, the allergic sensitization-processes also involves a role for mast cells. Recent findings show that their functionality is not only pro-inflammatory, but can on the contrary have suppressive or immunomodulatory effects in allergic inflammation.

The above passage isn’t a terrible slog, and it’s fairly clear that the whole passage is about mast cells. But here’s a version of the same passage—the real version as it were—which demonstrates that the passage *feels* a lot clearer when mast cells, the “characters” driving the narrative, are also the grammatical subject of the sentence and the referent for the key verbs:⁶

Mast cells are typically regarded as troublesome cells due to their prominent role in IgE-dependent allergic hypersensitivity reactions such as allergic asthma and food allergy. Further, it seems that mast cells are also able to play an additional role in the allergic sensitization-processes. Recent findings show that mast cell functionality is not only pro-inflammatory, but can on the contrary have suppressive or immunomodulatory effects in allergic inflammation.

Both versions of the passage are consistently about mast cells, but the second version makes that consistency much more obvious to readers as mast cells are the main character of every sentence. That clear consistency allows us to devote more of our brain power to recalling technical terms (like immunomodulatory) and comprehending the key ideas. That makes it both easier and more interesting to read.

To further illustrate the principle, let's take a nicely straightforward passage and rewrite it so that the characters are objects (rather than subjects) and the actions are nouns⁷ (rather than verbs). Here's the nicely clear original:⁸

What most people really feel nostalgic about has little to do with the internal structure of 1950s families. It is the belief that the 1950s provided a more family-friendly economic and social environment, an easier climate in which to keep kids on the straight and narrow, and above all, a greater feeling of hope for a family's long-term future, especially for its young.

In these two sentences, the character is a belief rather than a person or thing. However, the passage is still clear to the reader because it keeps the character consistent and explains what that character does (creates nostalgia) to who (people at large). Imagine if the author wrote this instead:

People feel nostalgic not about the internal structure of 1950s families. Rather, the beliefs about how the 1950s provided a more family-friendly economic and social environment, an easier climate in which to keep kids on the straight and narrow, and above all, a greater feeling of hope for a family's long-term future (especially for its young) are what lead to those nostalgic feelings.

This second version says substantially the same thing, but it's tedious to read because the character changes abruptly from "people" to "beliefs" (which works against cohesion) and one has to get to the end of the sentence to learn how these beliefs fit in. The key point is this: one of the best things you can do to revise for greater clarity is to recast a passage so that the characters are the grammatical subjects and the key actions are the verbs.

Practice Exercise 11.3.1

Rewrite these passages to make the "characters" the grammatical subjects and the key "actions" the verbs. That is, make them clearer.

1. The scarcity of research funds for nutritional scientists means that offers by food companies to fund such research may be especially attractive. The implicit pressure to shape the language of the findings to avoid alienation between scholars and companies is worrisome to consider.
2. While educational experiences are an obvious benefit of tribal colleges, the needs tribal communities have for economic development, cultural vitality, and social ties are also addressed by educational institutions.

References

¹Williams and Bizup, *Style*, 171.

²<http://www.termpaperwarehouse.com/essay-on/History-Of-Magna-Carta/82596>. Let this example further demonstrate why you should never, ever even look at these websites.

³*Encyclopædia Britannica*, s.v. "Magna Carta."

⁴Aletta D. Kraneveld and others, "The two faces of mast cells in food allergy and allergic asthma: The possible concept of Yin Yang," *Biochimica et Biophysica Acta*, 1822 (2012): 96.

⁵When you turn a verb into a noun it's called a nominalization. For example, "write" becomes "writings," and "think" becomes "thought."

⁶Stephanie Coontz, *The Way We Really Are: Coming to Terms with America's Changing Families* (New York: Basic Books, 1997), 34.

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11.4: Giving the Reader Pleasure

Media Alternative

Listen to an audio version of this page (2 min, 58 sec):

Academic writing is not wholly utilitarian. An elegant and apt turn of phrase is satisfying both to write and to read. While you can't often summon elegance out of nowhere, you can learn a few structures that are often pleasing to the reader's ear because they harmonize *what* you're saying with *how* you're saying it. Here are two rhetorical tricks that you can use to reinforce your points.

1. Balance. Readers often find balanced sentences and phrases pleasing. The Cleopatra example above ("*goddess as a child, queen at eighteen, celebrity soon thereafter*") illustrates parallelism, which is one kind of balance: using parallel structures to convey a parallel idea. This parallelism not only helps Schiff be powerfully concise, it quickly and vividly conveys the idea that Cleopatra led a remarkable life. Williams and Bizup¹ offer another example of an elegant sentence in which the two parts are balanced in their structure:

A government that is unwilling to listen to the moderate hopes of its citizenry must eventually answer to the harsh justice of its revolutionaries.

The same sentence with the parallel parts marked in bold:

A government that is unwilling to **listen to the moderate hopes of its citizenry** must eventually **answer to the harsh justice of its revolutionaries**.

The balanced structure and contrasting language reinforce the author's either-or point: "listen" *or* "answer"; "moderate hopes" *or* "harsh justice", "citizenry" *or* "revolutionaries." The balanced structure adds rhetorical force to the argument.

2. Emphasis. Read these sentences out loud, or imagine yourself doing so:
 - **Version 1:** But far and away, the largest weight-inducing food, out-stripping all others, was the potato chip.²
 - **Version 2:** But far and away, the potato chip was the largest weight-inducing food, out-stripping all others.

The first version places a particular rhetorical emphasis on "the potato chip" because it comes last in the sentence after a three-part build-up. The second version says the exact same thing, and it isn't hard to see that "potato chip" is the key part of the sentence. However, the rhetorical emphasis on "the potato chip" is somewhat weaker. This common rhetorical trick is to put the part you want to emphasize at the very end of the sentence.

These are just two rhetorical structures that scholars have identified. You can find others (Google "rhetorical device") that you can bring into your repertoire. Most people can't set out to write elegantly per se, and you certainly shouldn't spend your writing time crafting elegantly balanced sentences that have little to do with your argument or analysis. But the more familiar you are with these rhetorical structures, the more often you can recognize and use them.

References

¹Williams and Bizup, *Style*, 171.

²Michael Moss, *Salt Sugar Fat: How the Food Giants Hooked Us* (New York: Random House, 2013), 328.

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11.5: Understanding Convoluted Sentences

Media Alternative

Listen to an audio version of this page (3 min, 27 sec):

There is less tolerance for academese than there used to be in scholarly communities; however, a lot of landmark texts were written in a time when there wasn't such a high value placed on clarity and concision. In your studies, then, you will probably have to engage with important texts that violate almost all the advice given here.



A complex sentence makes the reader work harder; is the complexity necessary?
Photo by [Kampus Production](#) from [Pexels](#) under the [Pexels License](#)

Consider the following example from Talcott Parsons, a sociological theorist noted for both his intellectual force and utterly impenetrable writing style. In reading this passage,¹ imagine “ego” and “alter” as two people interacting:

Communication through a common system of symbols is the precondition of this reciprocity or complementarity of expectations. The alternatives which are open to alter must have some measure of stability in two respects: first, as realistic possibilities for alter, and second, in their meaning to ego. This stability presupposes generalization from the particularity of the given situations of ego and alter, both of which are continually changing and are never concretely identical over any two moments in time. When such generalization occurs, and actions, gestures, or symbols have more or less the same meaning for both ego and alter, we may speak of a common culture existing between them, through which their interaction is mediated.

Here's a version after I edited for concision using the three moves described above:

Reciprocity, or complementary expectations, depends on a common system of symbols. The symbolic alternatives for alter must be stable, in that they are both realistic for alter and meaningful to ego. That is, actions, gestures, or symbols must have a shared and persistent meaning for ego and alter even though ego and alter are in different situations and are constantly changing. When meanings are shared and persistent, we may say that the interaction between alter and ego is mediated by a common culture.

The revised version is about 30 percent shorter, and it demonstrates how concision makes one's points come through more clearly. You will almost certainly have to read works of authors who did not prioritize clarity and concision (or even cohesion and coherence), and that's a drag. But knowing how wordiness interferes with clarity can help you distill essential meanings from

challenging texts. In many ways, writing well and reading incisively are two facets of the same cognitive skill set.

Practice Exercise 11.5.1

Take these straightforward passages and make them less clear without changing the meaning. Turn verbs into nouns and make subjects into objects.

1. “Statisticians prepared to use spatial models need to keep the role of the models in perspective. When scientific interest centers on the large-scale effects, the idea is to use a few extra small-scale parameters so that the large-scale parameters are estimated more efficiently.”²
2. “Social scientists will be led astray if they accept the lies organizations tell about themselves. If, instead, they look for places where the stories told don’t hold up, for the events and activities those speaking for the organization ignore, cover up, or explain away, they will find a wealth of things to include in the body of material from which they construct their definitions.”³

References

¹Talcott Parsons and Edward Shills eds., *Toward a General Theory of Action*. (Cambridge, MA: Harvard University Press, 1967), 105.

²Noel A.C. Cressie, *Statistics for Spatial Data* (New York: Wiley, 1991), 435.

³Howard S. Becker, *Tricks of the Trade: How To Think About Your Research While You’re Doing It* (Chicago: University of Chicago Press, 1998), 118.

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11.6: Exercises and Further Resources

11.09: Exercises and Further Resources

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12: LANGUAGE - MEANING AND DEFINITION

The philosopher Ludwig Wittgenstein (1889-1951) was one of the most influential, and controversial, philosophers of the twentieth century. He spent most of his time thinking and writing about languages and how they work, with his theme focusing on the ways that language can create philosophical problems. He started off his career claiming that all philosophical problems are actually linguistic in nature, came up with a way of “proving” that all philosophical problems are actually linguistic ones (and if they’re not linguistic, then they are literally meaningless), left philosophy since there was nothing left to do in it, realized he was wrong, and spent the rest of his life trying to understand all the ways that there are genuine problems in philosophy that actually aren’t linguistic and offering ways that we might better understand them. Regardless of whether one agrees with Wittgenstein’s conclusions, rational people ought to concede he was right about one thing: many disagreements stem from linguistic problems. To resolve this, we simply (though it’s not actually simple) must use language clearly and precisely. If we eliminate all linguistic issues, then we’re left with the more meaningful philosophical problems, and *real* arguments can now happen since we know exactly what we’re talking about.

So how do we resolve these linguistic problems? By doing a few things:

- Appreciating the context in which we are talking, like the situation, audience, etc.
- Understanding the nature of the claims we are making (Are they generally accepted? Are they our own opinions?)
- Using simple and precise language (Instead of “There was that one day some time last week” you say “Last Wednesday” or instead of saying, “I don’t believe in religion” since I don’t know if that means you don’t believe religions exists, don’t believe in a particular religion, don’t believe God exists, etc., and instead say, “I don’t have a particular faith I practice because I don’t think any are correct.”)
- Clearly defining any ambiguous words you might use (like if you say, “I wish I were back at home” when you’re sitting in your living room, I might be wondering about your sanity, but if you say, “I wish I were back home in the town I grew up” then you’ve clarified what you mean by “home.”)

It’s easy, but tedious, to be clear in your speech and writing. If you practice it, however, it becomes second-nature and you will rarely be misunderstood or misinterpreted.

[12.1: Techniques of Defining- “Semantics” vs “Syntax” and Avoiding more Ambiguity](#)

[12.2: Criteria for Framing Definitions- It’s all about Context and Audience](#)

[12.3: Defining Terms Appropriately](#)

[12.4: Cognitive and Emotive Meaning - Abortion and Capital Punishment](#)

[12.5: Functions of Language and Precision in Speech](#)

[12.6: Defining Terms- Types and Purposes of Definitions](#)

12.1: Techniques of Defining- “Semantics” vs “Syntax” and Avoiding more Ambiguity

There are two big ways that statements can be ambiguous: they can use **improper semantics** or **improper syntax**. A semantic problem is one where you are running afoul of the meanings and word choices you have made or are using, and a syntactic problem is one where you are not phrasing or organizing your thoughts in a clear fashion. The goal with any writing is to make sure that your intended message is properly received. The best way to do this is to speak clearly, succinctly, and directly using the most precise words and grammar that you can.

You can run into semantic problems when you

- Don't use the correct words to express what you intend to communicate; or
- Use words with more than one meaning

English has many, many words that mean the same thing, and it is always fun to use the words that are the most poetic, but you should never sacrifice clarity for the sake of prose (when writing an argumentative paper). If you're writing poetry or fiction or almost anything except a critical paper, go ahead and go nuts with beautiful language and let the words flow from your fingertips and caress your pages like a fresh dewdrop falling on young grass at the dawn of a crisp spring morning. Otherwise, stick to the basics.

I think it's easiest to understand how to avoid semantic issues with examples. Look at the following sentences below and see how some sentences do a better job of communicating:

- Dallas cop fatally shoots neighbor in apartment after mistaking it for own

(It's unclear what the pronouns refer to)

- Dallas cop fatally shoots neighbor in his apartment after mistaking it for her own, police say

(This is better, but still not clear enough)

- A Dallas police officer fatally shot a man after she entered the wrong residence in her apartment building, thinking she was in her own home, authorities say.

(Longer, but quite clear)

“Fun to speak Yoda-like in riddles, is it not? Speak in whatever order you can! Versatile language is English, understand me you must.” While you still understand what I'm saying, it's much easier if I just say, “It can be fun to speak like Yoda, and you'll still understand me because that's how English works.” This is just one example of how syntax can impact the ways in which people understand you, and all this does is make people have to think a little harder about what you're saying in order to understand what you mean. There are more complex ways that syntax can go wrong and your meaning can actually be lost. The goal is to avoid any possible misperceptions in your language and meaning by doing the following

- Use a grammatical structure that allows for no confusion.
- Order your sentences so that they flow properly from one to another in the most natural fashion.
- Avoid using overly long or complex language and sentences.
- Write the most important points first and supporting ones later so that your reader has no problems following what you're saying. When making an argument, it's no problem to start by “spoiling” your conclusion.

Just like with semantic problems, I think it's easiest to understand how to avoid syntactic issues with examples. Look at the following sentences below and see how some do better jobs of communicating:

- Georgia mother charged in murders of 4 young children, their father smiles in court

(Who is doing the smiling? I think a comma was left out!)

- “Do you mind if I keep going?” Answer 1: Yes. Answer 2: No.

(The problem here is that with how the question is phrased, answering yes or no might mean the same thing – “yes, keep going” or “no, I don’t mind”)

One thing that helps to make things very clear is by examining and stating the relationship between concepts. Two very common relationships worth covering are necessity and sufficiency.

Necessary and Sufficient Conditions²³

In a conditional statement (“If...then...”), two conditions are given: a necessary and a sufficient condition.

Sufficient Conditions:

A is a sufficient condition for B whenever A is all that is needed to make B true, or whenever the occurrence of A is all that is needed for the occurrence of B.

If Fido is a dog, then Fido is a mammal.

“Fido is a dog” is all that’s needed to make it true that “Fido is a mammal.” So “Fido is a dog” is a sufficient condition for “Fido is a mammal.” Similarly, “Fluffy is a cat,” “Pokey is a rhinoceros,” “Trunky is an elephant,” and “Ollie is an ocelot” would be sufficient conditions to make each one of them mammals.

If it rains, the sidewalk will be wet.

If a dog pees on it, the sidewalk will be wet.

If someone spills soda on it, the sidewalk will be wet.

If someone sprays a hose on it, the sidewalk will be wet.

In each case, the antecedent (first term, after the “if”) expresses a sufficient condition for “the sidewalk will be wet.”

Necessary conditions: B is a *necessary* condition for A whenever A cannot occur without B also occurring, or whenever A cannot be true without B also being true. So, in all the cases above, the *consequent* (second term, after the “then”) is a necessary condition.

If Fido is a dog, then he is *necessarily* a mammal.

If I spray a hose on it, the sidewalk will *necessarily* get wet.

If John is older than Kevin, and Kevin is older than Lanai, then John is *necessarily* older than Lanai.

In each case, the word “necessarily” is not needed, because the conditional sentence already asserts the necessity.

For the following, fill in the blanks with “necessary” or “sufficient.”

1. Being a quarterback in the NFL is a _____ condition for being a football player.
2. Being a football player is a _____ condition for being an NFL quarterback.
3. Being able to fly a plane is a _____ condition for being an airplane pilot.
4. Spraying a hose on a dog is a _____ condition for making the dog's fur wet.
5. Being a guitarist is a _____ condition for being a musician.
6. Being a musician is a _____ condition for being a guitarist.
7. Firing an unsilenced gun is a _____ condition for making a loud noise.

8. Being famous is a _____ condition for being a movie star.

9. Being a movie star is a _____ condition for being famous.

Now, rewrite each of the above as a conditional sentence.

Because necessary conditions are distinct from sufficient conditions, the antecedent and consequent of a conditional statement cannot be reversed if you wish to maintain the truth and meaning of the sentence. In other words, saying:

Whenever a patient is feeling pain, the pre-occipital lobe of the brain is active.

is not the same as saying:

Whenever the pre-occipital lobe of the brain is active, the patient is feeling pain.

These cases should make that clear:

If that's a dog, then it's a mammal.

If that's a mammal, then it's a dog.

If you have five dollars, you have some money.

If you have some money, you have five dollars.

If you go outside in winter then you'll feel cold.

If you feel cold, then you've gone outside in the winter.

If you find a sentence where the meaning stays (essentially) the same when you've reversed antecedent and consequent, then you've found a case of what we call a **biconditional**. The biconditional is usually written as "if, and only if..." and both conditions are necessary and sufficient for each other. For example,

The existence of a child is a necessary and sufficient condition to know there is a parent.

There is a child if and only if there is a parent.

There is a parent if and only if there is a child.

12.2: Criteria for Framing Definitions- It's all about Context and Audience

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Before getting into any of the more analytic details of logical reasoning, let's consider the ways in which ideas 'play out' in the world, and the way we arrive at most of our beliefs. Most textbooks on modern logic assert that the basic unit of logic is the statement – a simple sentence which can be either true or false. But it seems to me that statements have to come from somewhere, and that they do not emerge from nothing. People do not come to believe things at random, or by magic. To my mind, the most obvious places where statements are born are one's intellectual environments, one's problems, and the questions that you and others in your environment tend to ask. Good thinking also begins in situations which prompt the mind to think differently about what it has taken for granted so far.

Intellectual Environments

Where does thinking happen? This may sound as if it's a bit of a silly question. Thinking, obviously, happens in your mind. But people do more than just think their own thoughts to themselves. People also share their thoughts with each other. Thoughts do not remain confined within your own brain: they also express themselves in your words and your actions. I'd like to go out on a bit of a limb here, and say that thinking happens not only in your mind, but also any place where two or more people gather to talk to one another and share their ideas with each other. In short, thinking happens wherever two or more people could have a dialogue with each other. In that dialogue, at least two people (but possibly many more) can express, share, trade, move around, examine, criticize, affirm, reject, modify, argue about, and generally communicate their own and each other's ideas. The importance of dialogue in reasoning is perhaps most important, and also most obvious, when we are reasoning about moral matters. The philosopher Charles Taylor (*Malaise of Modernity*, pg. 32) said:

Reasoning in moral matters is always reasoning with somebody. You have an interlocutor, and you start from where that person is, or with the actual difference between you; you don't reason from the ground up, as though you were talking to someone who recognized no moral demands whatever.

What Taylor says about moral reasoning also applies to other things we reason about. Whenever you have a conversation with someone about whether something is right, wrong, true, false, partially both, and so on, you do not start the conversation from nothing. Rather, you start from your own beliefs about such things, and the beliefs held by your partner in the conversation, and the extent to which your beliefs are the same, or different, as those of the other person. It is not by accident that Plato, one of the greatest philosophers in history, wrote his books in the form of dialogues between Socrates and his friends. Similarly, French philosopher Michel Foucault observed that especially among Roman writers, philosophy was undertaken as a social practice, often within institutional structures like schools, but also through informal relations like friendships and families. This social aspect of one's thinking was considered normal and even expected:

When, in the practice of the care of the self, one appealed to another person in whom one recognised an aptitude for guidance and counseling, one was exercising a right. And it was a duty that one was performing when one lavished one's assistance on another... (Foucault, *The Care of the Self*, pg. 53)

So, to answer the question 'Where does thinking happen?' we can say: 'any place where two or more people can have a conversation with each other about the things that matter to them'. And there are lots of such places. Where the Romans might have listed the philosophy schools and the political forums among those places, we today could add:

- Movies, television, pop music, and the entertainment industry
- Internet-based social networks like Facebook and YouTube
- Streets, parks, and public squares
- Pubs, bars, and concert venues
- Schools, colleges, and universities
- Mass media
- Religious communities and institutions

- The arts
- The sciences
- Courtrooms and legal offices
- Political settings, whether on a small or large scale
- The marketplace, whether local or global
- Your own home, with your family and friends
- Can you think of any more places like this?

In each of the places where thinking happens, there's a lot of activity. Questions are asked, answers are explored, ideas are described, teachings are presented, opinions are argued over, and so on. Some questions are treated as more relevant than others, and some answers meet with greater approval than others. It often happens that in the course of this huge and complicated exchange, some ideas become more influential and more prevalent than others. You find this in the way certain words, names, phrases or definitions get used more often. And you find it as certain ways to describe, define, criticize, praise, or judge things are used more often than others. The ideas that are expressed and traded around in these ways and in these places, and especially the more prevalent ideas, form the intellectual environment that we live in. Most of the time, your intellectual environment will roughly correspond to a social environment: that is, it will correspond (at least loosely) to a group of people, or a community that you happen to be part of. Think about all the groups and communities that you belong to, or have belonged to at one time or another:

- Families
- Sports teams
- The student body of your college
- The members of any social club you have joined
- The people at your workplace
- Your religious group (if you are religious)
- People who live in the same neighbourhood of your town or city
- People who speak the same language as you
- People who are roughly the same age as you
- People who come from the same cultural or ethnic background
- People who like the same music, movies or books as you
- People who play most of the same games as you
- Can you think of any more?

An intellectual environment will have a character of its own. That is, in one place or among one group of people, one idea or group of related ideas may be more prevalent than other ideas. In another place and among other people, a different set of ideas may dominate things. Furthermore, several groups may have very similar intellectual environments, or very different ones, or overlapping ones. Also note that you probably live in more than one social environment, and so you are probably hearing ideas from more than one intellectual environment too. An intellectual environment, with its prevalent ideas, surrounds everyone almost all the time, and it profoundly influences the way people think. It's where we learn most of our basic ideas about life and the world, starting at a very early age. It probably includes a handful of stock words and phrases that people can use to express themselves and be understood right away. This is not to say that people get all of their thoughts from their environment. Obviously, people can still do their own thinking wherever they are. And this is not to say that the contents of your intellectual environment will always be the same from one day to the next. The philosopher Alasdair MacIntyre observed that an intellectual tradition is often a continuity of conflict, and not just a continuity of thought. But this is to say that wherever you are, and whatever community you happen to be living in or moving through, the prevalent ideas that are expressed and shared by the people around you will influence your own thinking and your life in profound and often unexpected ways. By itself, this fact is not something to be troubled about. Indeed, in your early childhood it was probably very important for you to learn things from the people around you. For instance, it was better for a parent to tell you not to touch a hot barbecue with your bare hand, than for you to put your hand there yourself and find out what it feels like. But as you grow into adulthood, it becomes more and more important to know what one's intellectual environment is really like. It is very important to know what ideas are prevalent there, and to know the extent to which those ideas influence you. For if you know the character and content of the intellectual environment in which you live, you will be much better able to do your own thinking. You might end up agreeing with most, or even all of the prevalent ideas around you. But you will have agreed with them for your own reasons, and not (or not primarily) because they are the ideas of the people around you. And that will make an enormous difference in your life. Some intellectual environments are actually hostile to reason and rationality. Some people become angry, feel personally attacked, or will deliberately resist the questioning of certain ideas and beliefs. Indeed, some intellectual environments hold that intellectual thinking is bad for you! Critical reasoning sometimes takes great courage, especially when your thoughts go against the prevalent ideas of the time and place where you live.

World Views

Eventually, the ideas that you gathered from your intellectual environment, along with a few ideas of your own that you developed along the way come together in your mind. They form in your mind a kind of plan, a picture, or a model of what the world is like, and how it acts, and so on. This plan helps you to understand things, and also helps you make decisions. Philosophers sometimes call this plan a world view. Think for a moment about some of the biggest, deepest and most important questions in human life. These questions might include:

- What should I do with my life? Where should I go from here? Should I get married? What career should I pursue? Where is my place in the world? How do I find it? How do I create it?
- Is there a God? What is God like? Is there one god, or many gods? Or no gods at all? And if there is, how do I know? And if there's not, how do I know?
- Why are we here? Why are we born? Is there any point to it all?
- What is my society really like? Is it just or unjust? And what is Justice?
- Who am I? What kind of person do I want to be?
- What does it mean to be an individual? What does it mean to be a member of society?
- What happens to us when we die?
- What do I have to do to pass this course?
- Just what are the biggest, deepest and most important questions anyway?

These are philosophical questions. (Well, all but one of them.) Your usual way of thinking about these questions, and others like them is your world view. Obviously, most people do not think about these questions all of the time. We are normally dealing with more practical, immediate problems. What will I have for dinner tonight? If the traffic is bad, how late might I be? Is it time to buy a new computer? What's the best way to train a cat to use the litter-box? But every once in a while, a limit situation will appear, and it will prompt us to think about higher and deeper things. And then the way that we think about these higher and deeper things ends up influencing the way that we live, the way we make choices, the ways that we relate to other people, and the way we handle almost all of our problems. The sum of your answers to those higher and deeper questions is called your 'world view'. The word 'world view' was first coined by German philosopher Albert Schweitzer, in a book called "The Decay and Restoration of Civilization", first published in 1923. Actually, the word that Schweitzer coined here is the German word *Weltanschauung*. There are several possible ways to translate this word. In the text quoted above, as you can see, it's translated as "theory of the universe". It could also be translated as "theory of things" or "world conception". Most English speakers use the simpler and more elegant sounding phrase "world view". Here's how Schweitzer himself defined it:

The greatest of the spirit's tasks is to produce a theory of the universe. What is meant by a theory of the universe? It is the content of the thoughts of society and the individuals which compose it about the nature and object of the world in which they live, and the position and the destiny of mankind and of individual men within it. What significance has the society in which I live and I myself in the world? What do we want to do in the world? What do we hope to get from it? What is our duty to it? The answer given by the majority to these fundamental questions about existence decides what the spirit is in which they and their age live. (Schweitzer, *The Decay and Restoration of Civilization*, pg. 80-1)

Schweitzer's idea here is that a world-view is more than a group of beliefs about the nature of the world. It is also a bridge between those scientific or metaphysical beliefs, and the ethical beliefs about what people can and should do in the world. It is the intellectual narrative in terms of which the actions, choices, and purposes of individuals and groups make sense. It therefore has indispensable practical utility: it is the justification for a way of life, for individuals and for whole societies. In this sense, a world view is not just something you 'have'; it is also something that you 'live with'. And we cannot live without one. "For individuals as for the community," Schweitzer said, "life without a theory of things is a pathological disturbance of the higher capacity for self-direction." (Schweitzer, *ibid*, pg. 86) Let's define a world view as follows: A world view is the sum of a set of related answers to the most important questions in life. Your own world view, whatever it is, will be the sum of your own answers to your philosophical questions, whatever you take those questions to be, and whether you have thought about them consciously or not. Thus your world view is intimately tied to your sense of who you are, how you want to live, how you see your place in your world and the things that are important to you. Not only your answers to the big questions, but also your choice of which questions you take to be the big questions, will form part of your world view. And by the way, that's a big part of why people don't like hearing criticism. A judgment of a world view is often taken to be a judgment of one's self and identity. But it doesn't have to be that way. Some world views are so widely accepted by many people, perhaps millions of people, and are so historically influential, perhaps over thousands of years, that they have been given names. Here are a few examples:

- **Modernism:** referring to the values associated with contemporary western civilization, including democracy, capitalism, industrial production, scientific reasoning, human rights, individualism, etc.
- **Heliocentrism:** the idea that the sun is at the center of our solar system, and that all the planets (and hundreds of asteroids, comets, minor planets, etc.) orbit around the sun.
- **Democracy:** the idea that the legitimacy of the government comes from the will of the people, as expressed in free and fair

elections, parliamentary debate, etc.

- **Christianity:** The idea that God exists; that humankind incurred an 'original sin' due to the events in the Garden of Eden, and that God became Man in the person of Jesus to redeem humanity of its original sin.
- **Islam:** The idea that God exists, and that Mohammed was the last of God's prophets, and that we attain blessedness when we live by the five pillars of submission: daily prayer, charity, fasting during Ramadan, pilgrimage to Mecca, and personal struggle.
- **Marxism:** The idea that all political and economic corruption stems from the private ownership of the means of production, and that a more fair and just society is one in which working class people collectively own the means of production.
- **Deep Ecology:** The idea that there is an important metaphysical correlation between the self and the earth, or that the earth forms a kind of expanded or extended self; and that therefore protecting the environment is as much an ethical requirement as is protecting oneself.
- **The Age of Aquarius/The New Age:** The idea that an era of peace, prosperity, spiritual enlightenment, and complete happiness is about to dawn upon humankind. The signs of this coming era of peace can be found in astrology, psychic visions, Tarot cards, spirit communications, and so on.

And some of these world views may have other, sub-views bundled inside them. For instance:

- Democracy
 - a. Liberalism
 - b. Conservatism
 - c. Democratic Socialism
- Buddhism
 - a. Mahayana
 - b. Theravada
 - c. Tibetan Bon-Po
 - d. Zen

Clearly, not all world views are the same. Some have different beliefs, different assumptions, different explanations for things, and different plans for how people should live. Not only do they produce different answers to these great questions, but they often start out with different great questions. Some are so radically different from each other that the people who subscribe to different world views might find it very difficult to understand each other. In summary, your world view and the intellectual environment in which you live, when taken together, form the basic background of your thinking. They are the source of most of our ideas about nearly everything. If you are like most people, your world view and your intellectual environment overlap each other: they both support most of the same ideas. Sometimes there will be slight differences between them; sometimes you may find differences so large that you may feel that one of them must be seriously wrong, in whole or in part. Differing world views and differing intellectual environments often lead to social and personal conflict. It can be very important, therefore, to consciously and deliberately know what your own world view really is, and to know how to peacefully sort out the problems that may arise when you encounter people who have different world views.

12.3: Defining Terms Appropriately

Now it is your turn to go about clarifying all the terms that you use in your work. For something you are writing, you are to go through your main arguments first (and every other part, if you have the time) very slowly and cautiously examining every keyword you use and ask yourself the following:

- What do I want to say here?
- Is this sentence saying what I want it to?
- Are these words expressing what I want them to?
- Are there better words to use? (ie, more precise vocabulary)
- Are there any structural problems getting in the way? Do your thoughts and sentences flow into each other and appear in the right order?
- If you have to use ambiguous words, have you defined them using an appropriate technique?
- Is the vocabulary you have chosen appropriate for your purposes? Do you need to use different vocabulary or methods of speech?

Very seriously considering each of these questions at every step in your writing will keep you quite busy.

12.4: Cognitive and Emotive Meaning - Abortion and Capital Punishment

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Types of Meanings

Cognitive meaning is when words are used to convey information and emotive meaning is when words are used to convey your own beliefs (your emotions). These relate back to the discussion of subjective and objective claims back in Chapter 2, but they are not the same thing. For example, you might want to say,

Coconut is disgusting.

This is a claim phrased as an **objective claim** (it's declarative and is subject to being true or false) and has cognitive meaning since it is communicating information. When someone says this, what they actually mean is something like this,

I believe that coconut is disgusting.

This claim is now phrased as a **subjective claim** with emotive meaning since the truth value of it is based upon the reality of whether or not I actually believe this and it is conveying my own feelings on the topic. Additionally, it is cognitive because it is conveying information. Every single emotive statement will also be cognitive because anything that is said conveys at least a minimal amount of information. The issue then is when something also (or only) conveys emotive meaning.

Why does this matter? Because if we're using a lot of emotive meaning, we might be muddling up the facts and the importance of what we're trying to say. For example, if I say, "those people are mean jerks," I might not be as convincing as if I say, "those people were just bullying that person in a wheelchair, which is not a nice thing to do." The hope is that we avoid emotive meaning as much as we can, but it's unavoidable in any argument: by taking a side and defending it, you will be using your own beliefs and emotions. That's just fine, but your goal should be to be as impartial and fair in your claims as you can be, remembering to defend each and every belief you have as much as is necessary to convince your reader that your viewpoint is justified.

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Framing Language

One of the ways that your intellectual environment and your world view expresses itself is in the use of framing language. These are the words, phrases, metaphors, symbols, definitions, grammatical structures, questions, and so on which we use to think and speak of things in a certain way. We frame things by describing or defining them with certain interpretations in mind. We also frame things by the way we place emphasis on certain words and not on others. And we frame things by interpreting and responding selectively to things said by others. As an example, think of some of the ways that people speak about their friendships and relationships. We say things like "We connected", "Let's hook up", "They're attached to each other", and "They separated". We sometimes speak of getting married as "getting hitched". These phrases borrow from the vocabulary of machine functions. And to use them is to place human relations within the frame of machine functions. Now this might be a very useful way to talk about relationships, and if so, then it is not so bad. But if for some reason you need to think or speak of a relationship differently, then you may need to invent a new framing language with which to talk about it. And if this is the only framing language you've ever used to talk about relationships, it might be extremely difficult for you to think about relationships any other way. As a thought experiment, see if you can invent a framing language for your friendships and relationships based on something else. Try using a framing language based on cooking, or travel, or music, or house building, as examples. Here's another example of the use of framing language. Consider the following two statements:

"In the year 1605, Guy Fawkes attempted to start a people's revolution against corruption, inherited privilege, and social injustice in the British government."

"In the year 1605, Guy Fawkes planned a terrorist attack against a group of Protestant politicians, in an attempt to install a Catholic theocracy in Britain."

Both of these statements, taken as statements of fact, are true. But they are both framed very differently. In the first statement,

Fawkes is portrayed as a courageous political activist. In the second, he is framed (!) as a dangerous religious fanatic. And because of the different frames, they lead the reader to understand and interpret the man's life and purposes very differently. This, in turn, leads the reader to draw different conclusions. In other situations, the use of framing language can have serious economic or political consequences. Consider, as an example, the national debate that took place in the United States over the Affordable Health Care Act of 2009. The very name of the legislation itself framed the discussion in the realm of market economics: the word 'affordable' already suggests that the issue has to do with money. And most people who participated in that national debate, including supporters and opponents and everything in between, spoke of health care as if it is a kind of market commodity, which can be bought or sold for a price. The debate thus became primarily a matter of questions like who will pay for it (the state? individuals? insurance companies?), and whether the price is fair. But there are other ways to talk about health care besides the language of economics. Some people frame health care as a human right. Some frame it as a form of organized human compassion, and some as a religious duty. But once the debate had been framed in the language of market economics, these other ways of thinking about health care were mostly excluded from the debate itself. As noted earlier, it's probably not possible to speak about anything without framing it one way or another. But your use of framing language can limit or restrict the way things can be thought of and spoken about. They can even prevent certain ways of thinking and speaking. And when two or more people conversing with each other frame their topic differently, some unnecessary conflict can result, just as if they were starting from different premises or presupposing different world views. So it can be important to monitor one's own words, and know what frame you are using, and whether that frame is assisting or limiting your ability to think and speak critically about a particular issue. It can also be important to listen carefully to the framing language used by others, especially if a difference between their framing language and yours is creating problems. And speaking of problems: this leads us to the point where the process of critical thinking begins.

Problems

Usually, logic and critical thinking skills are invoked in response to a need. And often, this need takes the form of a problem which can't be solved until you gather some kind of information. Sometimes the problem is practical: that is, it has to do with a specific situation in your everyday world.

For example:

- Perhaps you have an unusual illness and you want to recover as soon as possible.
- Perhaps you are an engineer and your client wants you to build something you've never built before.
- Perhaps you just want to keep cool on a very hot day and your house doesn't have an air conditioner.

The problem could also be theoretical: in that case, it has to do with a more general issue which impacts your whole life altogether, but perhaps not any single separate part of it in particular. Religious and philosophical questions tend to be theoretical in this sense. For example:

- You might have a decision to make which will change the direction of your life irreversibly.
- You might want to make up your mind about whether God exists.
- You might be mourning the death of a beloved friend.
- You might be contemplating whether there is special meaning in a recent unusual dream.
- You might be a parent and you are considering the best way to raise your children.

The philosopher Karl Jaspers described a special kind of problem, which he thought was the origin of philosophical thinking. He called this kind of problem a **Grenzsituationen**, or a "limit situation".

Limit situations are moments, usually accompanied by experiences of dread, guilt or acute anxiety, in which the human mind confronts the restrictions and pathological narrowness of its existing forms, and allows itself to abandon the securities of its limitedness, and so to enter new realm of self-consciousness. (Stanford encyclopaedia of philosophy, online edition, entry on Karl Jaspers.)

In other words, a limit situation is a situation in which you meet something in the world that is unexpected and surprising. It is a situation that more or less forces you to acknowledge that your way of thinking about the world so far has been very limited, and that you have to find new ways to think about things in order to solve your problems and move forward with your life. This acknowledgement, according to Jaspers, produces anxiety and dread. But it also opens the way to new and (hopefully!) better ways of thinking about things. In general, a limit situation appears when something happens to you in your life that you have never experienced before, or which you have experienced very rarely. It might be a situation in which a longstanding belief you have held up until now suddenly shows itself to have no supporting evidence, or that the consequences of acting upon it turn out

very differently than expected. You may encounter a person from a faraway culture whose beliefs are very different from yours, but whom you must regularly work with at your job, or around your neighbourhood. You may experience a crisis event in which you are at risk of death. A limit situation doesn't have to be the sort of experience that provokes a nervous breakdown or a crisis of faith, nor does it have to be a matter of life and death. But it does tend to be the type of situation in which your usual and regular habits of thinking just can't help you. It can also be a situation in which you have to make a decision of some kind, which doesn't necessarily require you to change your beliefs, but which you know will change your life in a non-trivial way.

Observation

Thus far, we have noted the kinds problems that tend to get thinking started, and the background in which thinking takes place. Now we can get on to studying thinking itself. In the general introduction, I wrote that clear critical thinking involves a process. The first stage of that process is observation. When observing your problem, and the situation in which it appears, try to be as objective as possible. Being objective, here, means being without influence from personal feelings, interests, biases, or expectations, as much as possible. It means observing the situation as an uninvolved and disinterested third-person observer would see it. (By 'disinterested' here, I mean a person who is curious about the situation but who has no personal stake in what is happening; someone who is neither benefitted nor harmed as the situation develops.) Although it might be impossible to be totally, completely, and absolutely objective, still it certainly is possible to be objective enough to understand a situation as clearly and as completely as needed in order to make a good decision. When you are having a debate with someone it is often very easy, and tempting, to simply accuse your opponent of being biased, and therefore in no position to understand something properly or make decisions. If someone is truly biased about a certain topic, it is rational to doubt what someone says about that topic. But having grounds for reasonable doubt is not the same as having evidence that a proposition is false. Moreover, having an opinion, or a critical judgment about something, or a world view, is not the same as having a bias. Let us define a bias here as the holding of a belief or a judgment about something even after evidence of the weakness or the faultiness of that judgment has been presented. We will see more about this when we discuss Value Programs. For now, just consider the various ways in which we can eliminate bias from one's observations as much as possible. Here are a few examples:

- Take stock of how clearly you can see or hear what is going on. Is something obstructing your vision? Is it too bright, or too dark? Are there other noises nearby which make it hard for you to hear what someone is saying?
- Describe your situation in words, and as much as possible use value-neutral words in your description. Make no statement in your description about whether what is happening is good or bad, for you or for anyone else. Simply state as clearly as possible what is happening. If you cannot put your situation into words, then you will almost certainly have a much harder time understanding it objectively, and reasoning about it.
- Describe, also, how your situation makes you feel. Is the circumstance making you feel angry, sad, elated, fearful, disgusted, indignant, or worried? Has someone said something that challenges your world view? Your own emotional responses to the situation is part of what is 'happening'. And these too can be described in words so that we can reason about them later.
- Also, observe your instincts and intuitions. Are you feeling a 'pull', so to speak, to do something or not do something in response to the situation? Are you already calculating or predicting what is likely to happen next? Put these into words as well.
- Using numbers can often help make the judgment more objective. Take note of anything in the situation that can be counted, or measured mathematically: times, dates, distances, heights, shapes, angles, sizes, monetary values, computer bytes (kilobytes, megabytes, etc.), and so on.
- Take note of where your attention seems to be going. Is anything striking you as especially interesting or unusual or unexpected?
- If your problem is related to some practical purpose, take note of everything you need to know in order to fulfill that purpose. For instance, if your purpose is to operate some heavy machinery, and your problem is that you've never used that machine before, take note of the condition of the safety equipment, and the signs of wear and tear on the machine itself, and who will be acting as your "spotter", and so on.
- If other people are also observing the situation with you, consult with them. Share your description of the situation with them, and ask them to share their description with you. Find out if you can see what they are seeing, and show them what you are seeing. Also, try to look for the things that they might be missing.

Separating your observations from your judgments and opinions can often be difficult. But the more serious the problem, the more important it can be to observe something non-judgmentally, before coming to a decision. With that in mind, here's a short exercise: which of the following are observations, and which are judgments? Or, are some of them a bit of both?

- That city bus has too many people on it.
- The letter was delivered to my door by the postman at 10:30 am.
- The two of them were standing so close to each other that they must be lovers.

- The clothes she wore suggested she probably came from a very rich family.
- The kitchen counter looked like it had been recently cleaned.
- He was swearing like a sailor.
- The old television was too heavy for him to carry.
- There's too much noise coming from your room, and it's driving me crazy!
- The latest James Bond film was a lot of fun.
- The latest James Bond film earned more than \$80 million in its first week.
- I hate computers!
- The guy who delivered the pizza pissed me off because he was late.

16

Two case studies: Abortion and Capital Punishment

We can apply all of these uses of language in two controversial topics: abortion and capital punishment. These two topics are full of claims and meanings of all kinds. Things to look at are:

- What type of language is used?
- How are terms defined?
- Which statements are more emotive and more cognitive?
- Which claims are subjective and which are objective?

There will be a lot more to keep in mind, but the next time you see an argument about one of these, consider all these things when you weigh the strength of the argument. I have four brief arguments below (one on each side of each of these arguments), so assess these for flaws because of the ways the “facts” and beliefs are being presented.

Argument One:

“Abortion is wrong because it’s murder. You are killing a tiny human being, and that’s just bad. It’s disgusting how they cut up the little person and suck them out of the womb. It’s evil because the bible says so, too.”

Argument Two:

“Abortion needs to be an option for every woman to have. It’s her body and she can do with it whatever she wants. I would hate it if someone told me what to do with my own body, so no one has the right to say people can’t get abortions.”

Argument Three:

“Capital punishment is wrong because it makes us as bad as the murderer. Just because they killed someone doesn’t mean we have to stoop to their level. It’s also cruel and no one should have to be murdered in the ways that they are, especially by the government. We should be ashamed of the practice.”

Argument Four:

“Capital punishment is the only fair punishment for murder. If someone kills another person, then they need to be killed, too. If you owe someone money, we make you pay it back. If I were murdered, I would want that person to die, too. Anything else is too lenient.”

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12.5: Functions of Language and Precision in Speech

Good Linguistic Habits¹⁷

Simplicity

Sometimes you may find that things are more complex or more elaborate than they appear to be at first. And it is often the job of reason to uncover layers of complexity behind appearances. Still, if you have two or more explanations for something, all of which are about as good as each other, the explanation you should prefer is the simplest one. This principle of simplicity in good reasoning is sometimes called Ockham's Razor. It was first articulated by a Franciscan monk named Brother William of Ockham, who lived from 1288 to 1348. His actual words were "Entia non sunt multiplicanda sine necessitate."¹⁸ In English, this means 'No unnecessary repetition of identicals'. This is a fancy way of saying, 'Well it's possible that there are twenty-three absolutely identical tables occupying exactly the same position in space and time, but it's much simpler to believe that there's just one table here. So let's go with the simpler explanation.' Ockham's original point was theological: he wanted to explain why monotheism is better than polytheism. It's simpler to assume there's one infinite God, than it is to assume there are a dozen or more. Ockham's idea has also been applied to numerous other matters, from devising scientific theories to interpreting poetry, film, and literature. Other ways to express this idea go like this: "All other things being equal, the simplest explanation tends to be the truth", and "The best explanation is the one which makes the fewest assumptions."

Precision

There are a lot of words in every language that have more than one meaning. This is a good thing: it allows us more flexibility of expression; it is part of what makes poetry possible; and so on. But for the purpose of reasoning as clearly and as systematically as possible, it is important to use our words very carefully. This usually means avoiding metaphors, symbols, rhetorical questions, weasel words, euphemisms, tangents, equivocations, and 'double speak'. When building a case for why something is true, or something else is not true, and so on, it is important to say exactly what one means, and to eliminate ambiguities as much as possible. The simplest way to do this is to craft good definitions. A definition can be imprecise in several ways; here are some of them.

- Too broad: it covers more things than it should.

Example of a broad definition: "All dogs are four-legged animals." (Does that mean that all four-legged animals are dogs?)

- Too narrow: it covers too few things.

Example of a narrow definition: "All tables are furniture pieces placed in the dining rooms of houses and used for serving meals." (Does that mean that tables in other rooms used for other purposes are not 'true' tables?)

- Circular: the word being defined, or one of its closest synonyms, appears in the definition itself.

Example of a Circular definition: "Beauty is that which a given individual finds beautiful." (This actually tells us nothing about what beauty is.)

- Too vague: The definition doesn't really say much at all about what is being defined, even though it looks like it does.

Example of a vague definition: "Yellowism is not art or anti-art. Examples of Yellowism can look like works of art but are not works of art. We believe that the context for works of art is already art."¹⁹ (And I don't know what this means at all.)

Patience

Good philosophical thinking takes time. Progress in good critical thinking is often very slow. The process of critical thinking can't be called successful if it efficiently maximizes its inputs and outputs in the shortest measure of time: we do not produce thoughts

in the mind like widgets in a factory. The reason for this is because good critical thinking often needs to uncover that which subtle, hard to discern at first, and easy to overlook. I define subtlety as ‘a small difference or a delicate detail which takes on greater importance the more it is contemplated.’ As a demonstration, think of how many ways you can utter the word ‘Yes’, and mean something different every time. This also underlines the importance of precision, as a good thinking habit. As another example: think of how the colour planes in a painting by Piet Mondrian, such as his ‘Composition with Yellow, Blue, and Red’ have squares of white framed by black lines, but none of the white squares are exactly the same shade of white. You won’t notice this if you look at the painting for only a few seconds, or if you view a photo of the painting on your computer screen, and your monitor’s resolution isn’t precise enough to render the subtle differences. But it is the job of reason to uncover those subtleties and lay them out to be examined directly. And the search for those subtleties cannot be rushed.

Consistency

When we looked at what a world view is, we defined it as ‘the sum of a set of related answers to the most important questions in life’. It’s important that one’s world view be consistent: that your answers to the big questions generally cohere well together, and do not obviously contradict each other. Inconsistent thinking usually leads to mistakes, and can produce the uncomfortable feeling of cognitive dissonance. And it can be embarrassing, too. If you are more consistent, you might still make mistakes in your thinking. But it will be a lot easier for you to identify those mistakes, and fix them. Consistency also means staying on topic, sticking to the facts, and following an argument to its conclusion. Obviously it can be fun to explore ideas in a random, wandering fashion. But as one’s problems grow more serious, it becomes more important to stay the course. Moreover, digressing too far from the topic can also lead you to commit logical fallacies such as Straw Man (creating an easy-to-defeat argument that no one actually believes) and Red Herring (deliberately diverting people away from the topic at hand).

Imprecision: Vagueness and Ambiguity²⁰

Vagueness: You know, that one thing that someone did once .

Vincinal the midden, you keck – right? Yeah, of course! You do agree with me, don’t you?

So do you know what that means? If you don’t, but you agreed with me anyway, then fell victim to obfuscation. Obfuscation is intentionally making something confusion, often with the intention of confusing the listener. In that case, I was saying something and trying to pressure you into agreeing with me. Perhaps a doctor uses medical jargon so that she doesn’t have to explain what is actually going – and that you won’t ask. Don’t obfuscate. It violates my primary class rule. By the way, “Vincinal the midden, you keck” means “Near the garbage heap, you vomit.” Yes, it’s English.

Obfuscation is just one example of unclarity. Unclarity is often the sign of unclear thoughts, so we’re going to our best to avoid being unclear for this reason. There are many types of unclarity out there, so we’ll examine them in the hope that you avoid them.

Vague terms are mostly imprecise. Like if I say, “I have a lot of M&Ms”, it doesn’t really tell you how many. Or if I say, “I’ll fix the car next month,” you don’t really have a good idea of

when that will happen. Many vagueness problems can be resolved by simply defining the vague terms more precisely, or avoiding them altogether.

There is an interesting fallacy-related paradox called a “sorites paradox” or “paradox of the heap”. Here is an example of one:

1. Someone with 1 finger does not have a lot of fingers.
2. If someone with 1 finger does not have a lot of fingers, someone with 2 fingers does not have a lot of fingers.
3. Therefore, someone with 2 fingers does not have a lot of fingers.
4. If someone with 2 fingers does not have a lot of fingers, then someone with 3 fingers does not have a lot of fingers.
5. Therefore, someone with 3 fingers does not have a lot of fingers.

...Therefore someone with 1,000,000,000 fingers does not have a lot of fingers

What are the problems with this line of reasoning? Well, it’s definitely unsound, because someone with 1 billion fingers certainly has a lot of them. It’s a paradox because there’s a clear contradiction in what we believe and no clear way out of it: the logic seems to make sense, but the conclusion is clearly wrong. So how do we resolve this paradox? Probably say that anything more than 11 fingers is a lot and leave it at that. However, what if we did this argument instead?

1. 1,000,000 grains of sand is a heap.
2. If 1,000,000 grains of sand is a heap, then 999,999 grains of sand is a heap.
3. Therefore, 999,999 grains of sand is a heap.

...Therefore 1 grain of sand is a heap.

How do we get out of this one? Maybe say you know a heap when you see it? There is no clear resolution to the difficulties here (but you can read more at Wikipedia if you want: http://en.Wikipedia.org/wiki/Sorites_paradox), so you just need to be aware of issues like this. I bring up sorites paradoxes because there is an important set of fallacies related to them. These are known as slippery slopes. Fallacies are when one uses a particular method of reasoning that generally goes wrong. The methods employed by most fallacies are just ways of reasoning or making arguments, and they are not necessarily automatically wrong (well, some formal fallacies can't be correct) but many informal fallacies use a line of reasoning that might actually be correct. Oftentimes, these lines of reasoning are incorrect when you encounter them. Slippery slopes are a prime example of a fallacy that people use and generally result in faulty conclusions, but may sometimes actually result in a strong argument if it's done carefully in the right contexts.

Slippery Slopes

The following is an example of a slippery slope:

Because we cannot draw a clear line between when someone is bald and is not bald, we cannot say that anyone is bald.

You can see how this is similar to a sorites paradox and goes a little further by claiming because we can't distinguish between traits when something changes gradually, we can't distinguish at all.

All slippery slopes have this general format: *A* makes sense, but *A* leads to *B*, and *B* is clearly wrong, so we should reject *A*. In the case of baldness, you are not bald if you have 120,000 hairs and if you are not bald if you have 120,000 hairs, then you are not bald if you have 119,999. Makes sense, right? But if this is true, then (via a sorites) if you have 1 hair, you are not bald. So, we should reject the idea that you are not bald if you have 5,000 hairs – which means if you have a full head of hair, you are bald.

In a slippery slope, you are worried about gradually sliding into a problem. These examples we have seen are examples of conceptual slippery slopes, which have 2 general assumptions:

- 1) We should not draw a distinction between things that are not significantly different
- 2) If *A* is not significantly different than *B* and *B* is not significantly different than *C*, then *A* is not significantly different than *C*

The real question to ask is this:

When do small differences make big differences?

Slippery slopes are common in ethics, and depending upon how you view things, they can be either a good argument or a terrible one. One kind can be called a “fairness slippery slopes” and awarding grades gives an excellent example:

If a person with 90% deserves an A, then it's only fair to give someone with 89% an A since there is no significant difference between their percentage in the class....If a person with 50% deserves an A, then a person with 49% deserves an A...

There are also causal slippery slope arguments, like:

Although assisted suicide (allowing someone, such as a doctor, to help someone else commit suicide) in certain cases is OK, we shouldn't allow it because it will lead to euthanasia (a person humanely ending the life of another person that is suffering and requests it), and that's not OK.

This can be a good argument if you think euthanasia really is a problem AND allowing assisted suicide will really lead to it. It is a fallacy if you incorrectly believe, or do not have reasons to support, the idea that assisted suicide WILL lead to euthanasia. There are many other examples of causal slippery slopes in which someone doesn't want to allow one thing they might like because they're worried it will lead to something they don't: gay marriage (the worry that it might lead to polygamy), military involvement (if we get into Syria, we will have to get into Iran), raises (If I give you a raise, I'll have to give everyone else a raise), etc. They have a specific format:

A is probably acceptable, but A leads to be B and B is not acceptable, so we shouldn't allow A

The important questions to ask are:

Is the result really bad? Is the result really very likely? Does this bad result outweigh the benefits of the proposal?

Ambiguity

College students make tasty snacks! Think about if this is said at a college bake sale or if it is said by a giant in the afternoon after playing a long game of squash the college dorms. The

sentence is ambiguous because you don't know exactly what I mean since it can be understood in different ways. There are two kinds of ambiguity:

Semantic ambiguity: ambiguous words

"I like football" (which football?)

"Let's all go to the shower" (the wedding shower, pervert)

Syntactic ambiguity: amphiboly, or vague grammar

"How to get money out of politics" (people don't spend money on it or how you can get money out of being a politician?)

"The conquest of the Persians" (were they conquering or being conquered?)

We can clarify an ambiguous statement by giving more information:

Mary had a little lamb...

It followed her to school

Or

And then some broccoli

The primary ways of fixing the problems of ambiguity are:

- 1) Distinguish ambiguous things
- 2) Restate things clearly
- 3) Reevaluate what is being said (in case you are actually wrong)

12.6: Defining Terms- Types and Purposes of Definitions

9 Defining Terms: Types and Purposes of Definitions ²¹

Clearly defining terms is one way of helping to resolve problems of ambiguity and there are many types of definitions one can use:

- Lexical or dictionary definitions

The OED defines “defines” as...

- Disambiguating definitions

“When I said...I meant...”

- Stipulative definitions

For the purposes of this class, a “kwijybo” is “a big dumb balding North American ape with no chin and a short temper”

- Precising definitions

A small amount of salt is less than .5 tsp

- Systematic or theoretical

Brother-in-law: husband of my sister (OR brother of my wife!)

The point of using definitions like these is simple: to make sure that you are clear in what you say. If anything can be uncertain, it is best to define it or use other, more precise words.

We will be covering fallacies more later in this course, but there are a few that are very relevant right now, as these are all ones that can be fixed by using a definitional approach. Again, a “fallacy” is drawing an unsupported conclusion by using a common method of reasoning that is usually in error. Being familiar with fallacies makes them very easy to recognize (and avoid yourself, as well as understand how to properly resolve them).

Loaded Question Fallacy

(Also known as complex question, fallacy of presupposition, trick question) The fallacy of asking a question that has a presupposition built in, which implies something (often questionable) but protects the person asking the question from accusations of false claims or even slander.

Example: Have you stopped sleeping in unicorn sheets?

This question is a real ‘catch-22’ since to answer ‘yes’ implies that you used to sleep in unicorn sheets but have now stopped, and to answer ‘no’ means you are still sleeping in them. The question rests on the assumption that you sleep in unicorn sheets, and so either answer to it seems to endorse that idea.

Equivocation

(Also known as doublespeak) A fallacy that occurs when one uses an ambiguous term or phrase in more than one sense, thus rendering the argument misleading. The ambiguity in this fallacy is lexical and not grammatical, meaning the term or phrase that is ambiguous has two distinct meanings. In other words, it happens when one term is assumed to mean the same thing in two different contexts, but actually means two different things. One can often see equivocation in jokes.

Example: Man is the only rational animal, and no woman is a man, so women are not rational.

Example: If you don't pay your exorcist you can get repossessed.

Example: A feather is light; whatever is light cannot be dark; therefore, a feather cannot be dark.

Amphiboly

A fallacy of ambiguity, where the ambiguity in question arises directly from the poor grammatical structure in a sentence. The fallacy occurs when a bad argument relies on the grammatical ambiguity to sound strong and logical.

Example: I'm going to return this car to the dealer I bought this car from. Their ad said "Used 1995 Ford Taurus with air conditioning, cruise, leather, new exhaust and chrome rims." But the chrome rims aren't new at all.

There are other kinds of amphiboly fallacies, like those of ambiguous pronoun reference: "I took some pictures of the dogs at the park playing, but they were not good." Does 'they' mean the dogs or the pictures "were not good"? And there is amphiboly when modifiers are misplaced, such as in a famous Groucho Marx joke: "One morning I shot an elephant in my pajamas. How he got into my pajamas I'll never know."

Fallacy of the Undistributed Middle

(Also known as undistributed middle term) A formal fallacy that occurs in a categorical syllogism (we'll look at these later), when the middle term is undistributed is not distributed at least in one premise. According to the rules of categorical syllogism, the middle term must be distributed at least once for it to be valid.

Example of the form: All X's are Y's; All Z's are Y's; Therefore, All X's are Z's.

Example in words: All ghosts are spooky; all zombies are spooky; therefore all ghosts are
zombies.

The problem here is that you're relating the incorrect categories with each other. It is fine to say, "All dogs are mammals, all mammals are animals, so all dogs are animals" but not "All dogs are mammals, all chihuahuas are mammals, so all chihuahuas are dogs" because even though your conclusion is true, the route that led you there is invalid.

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